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PART A

IONOSPHERIC DATA

ISSUED
DECEMBER 1962

SEE PAGE 55 FOR INDEX OF OBSERVED
IONOSPHERIC DATA BEGINNING JANUARY 1957

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

CRPL-F 220
PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
26 Dec. 1962

IONOSPHERIC DATA

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IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and dissemination of ionospheric and related geophysical data. While originally a by-product of the collection of data by the CRPL for use in radio propagation studies, the CRPL-F series bulletins, Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," have provided useful service by collecting and making available a wide variety of data in convenient form for use in research, not only on radio propagation and the ionosphere, but also on a wide variety of geophysical problems. Beginning with CRPL-F211, Part A, "Ionospheric Data," a number of changes have been made in the tables of ionospheric data which, by providing more information, should increase their usefulness.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into median determination (count) for all ionospheric characteristics listed. Also, the upper and lower quartile values, indicated by UQ and LQ in the tables, are listed for foF2, h'F2, h'F, and M(3000)F2. Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods, which, by improving the speed and efficiency of preparation, permit earlier publication of the data.

Graphs of critical frequencies and M(3000)F2 will continue to appear. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers are no longer included. This change was necessary to provide space for the enlarged tables. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc are still available from the CRPL and the IGY World Data Center A for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it was subject so some valid criticism for tampering with original data. The tables and graphs now show the ionospheric data just as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data now rests entirely with the originator.

Gaps in the tables when data normally might be expected indicate the data were not provided by the originator. Following the recommendation of the World-Wide Soundings Committee, only values of median foEs are listed. In the few cases where fEs is still reported instead of foEs, the data will not be printed. Data will appear in the F series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevier, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1961, the succeeding values being based on provisional data.

Smoothed Observed Zurich Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	9	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	48
1962	44	41	39	38	38							

Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle
foF1, FoE - - - Hundredths of a megacycle
h'F2, h'F, h'E - Kilometers
(M3000)F2 - - - Hundredths

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median
CNT - Count
UQ - Upper Quartile
LQ - Lower Quartile

WORLD-WIDE SOURCES OF IONOSPHERIC DATA

The ionospheric data given here in tables 1 to 100 and figures 1 to 100 were assembled by the Central Radio Propagation Laboratory for analysis and correlation, incidental to CRPL prediction of radio propagation conditions. The data are median values unless otherwise indicated. The following are the sources of the data in this issue:

Meteorological Service, Province of Macau, Asia:
- Macau

Commonwealth of Australia, Ionospheric Prediction Service of the Commonwealth Observatory:
- Brisbane, Australia
- Canberra, Australia
- Hobart, Tasmania
- Mawson

University of Graz:
- Graz, Austria

Defence Research Board, Canada:
- St. John's, Newfoundland

Radio Wave Research Laboratories, National Taiwan University, Taipeh, Formosa, China:
- Formosa, China

Heinrich Hertz Institute, German Academy of Sciences, Berlin:
- Juliusruh/Rugen, Germany

Icelandic Post and Telegraph Administration:
- Reykjavik, Iceland

Indian Council of Scientific and Industrial Research, Radio Research Committee, New Delhi, India:
- Ahmedabad (Physical Research Laboratory)
- Bombay (All India Radio)
- Calcutta (Institute of Radio Physics and Electronics)
- Delhi (All India Radio)
- Kodaikanal (India Meteorological Department)
- Madras (All India Radio)
- Tiruchy (All India Radio)
- Trivandrum (All India Radio)

Christchurch Geophysical Observatory, New Zealand Department of Scientific and Industrial Research:
- Cape Hallett (Adare), Antarctica
- Scott Base, Antarctica

Research Institute of National Defence, Stockholm, Sweden:
- Lycksele, Sweden

Post, Telephone and Telegraph Administration, Berne, Switzerland:
- Sottens, Switzerland

United States Army Signal Corps:
- Ft. Monmouth, New Jersey
- Thule, Greenland
- White Sands, New Mexico

National Bureau of Standards (Central Radio Propagation Laboratory):
- Fairbanks (College), Alaska (Geophysical Institute of the University of Alaska)
- Maui, Hawaii
- Washington, D. C.

TABLES OF IONOSPHERIC DATA

March 1962 - January 1959

TABLE 1

MAUI, HAWAII (20.0°N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	42	39	36	295	25	25	26	53	71	86	97	108	114	120	124	123	122	111	99	85	62	53	45	43
	CNT	29	31	30	30	30	30	29	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30
	UD	49	48	48	35	27	27	28	60	76	93	107	114	122	127	130	128	129	128	113	101	79	64	52	48
	LQ	36	34	30	27	22	23	22	48	67	75	90	105	109	115	113	114	106	100	77	57	54	39	38	39
h'F2	MED										280	290	290	295	300	295	2875	270	2475						
	CNT									3	11	27	29	29	30	31	30	30	26						
	UD										290	305	300	310	310	310	295	280	260						
	LQ										275	285	285	280	285	280	270	265	240						
h'F	MED	235	235	2225	2125	235	2925	285	4375	220	220	210	210	200	E 200	195	205	215	235	230	220	220	225	245	255
	CNT	31	31	30	30	30	30	30	30	30	31	31	31	30	28	26	27	29	29	31	31	31	31	31	31
	UD	260	245	240	220	280	315	295	245	230	225	220	220	205	200	205	230	230	240	240	225	225	240	260	260
	LQ	230	220	210	200	200	255	255	230	215	205	200	205	195	190	185	190	205	230	220	210	210	215	230	245
M(3000)F2	MED	329	335	345	350	3025	290	290	345	3325	315	305	305	300	300	305	310	320	335	345	335	330	315	310	310
	CNT	27	31	30	30	30	29	29	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30
	UD	335	350	355	365	325	310	300	355	345	320	315	320	315	310	310	320	330	340	350	340	345	330	320	330
	LQ	305	320	330	340	280	275	285	335	325	305	295	285	290	295	295	300	310	325	335	330	320	300	290	300
foF1	MED												U 460	475	480	460	U 440								
	CNT											1	9	16	12	6	5	1							
foE	MED							U 195		260	305	3225	340	350	3525	350	330	300	260	D 195					
	CNT		1	2				3	27	29	27	22	19	18	12	17	22	23	27	22	1				
h'E	MED								115	109	107	105	105	105	105	105	105	107	109	120					
	CNT			2				3	27	29	31	31	31	31	31	30	29	27	21	12	1				
foEs	MED	13	14	6	18	22	21	22	23	26	32	35	36	35	D 34	D 36	D 34	32	29	25	25	22	19	18	15
	CNT	31	31	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS. MARCH, 1962

TABLE 2

WASHINGTON, D.C. (38.7N, 77.1W) TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	305	315	315	32	33	315	27	405	575	605	685	70	735	745	73	755	72	66	59	505	43	35	335	315
	CNT	28	28	26	26	27	26	28	28	28	28	28	28	28	28	28	28	28	28	28	28	27	28	28	28
	UQ	36	35	36	34	36	35	30	44	63	72	74	81	84	88	86	84	80	78	72	60	54	46	42	40
	LQ	24	26	28	29	29	27	24	35	52	56	62	66	68	70	68	68	67	60	48	44	37	28	26	26
h'F2	MED									230	235	250	260	265	260	265	250	245	U 220						
	CNT									12	11	20	25	25	27	26	24	24	7						
	UQ									230	240	260	270	270	270	270	260	250	235						
	LQ									215	230	250	250	260	260	255	245	240	220						
h'F	MED	U 270	U 270	U 2625	260	U 250	U 240	U 250	2325	220	205	200	205	210	205	205	215	2175	225	215	2225	230	240	U 260	E 270
	CNT	28	28	28	28	28	26	28	28	28	26	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	UD	280	280	275	270	280	280	280	240	230	220	215	215	210	210	215	220	220	230	220	230	240	250	275	280
	LQ	260	260	250	250	240	230	240	230	215	200	200	195	200	200	200	205	210	220	210	220	220	235	250	250
M(3000)F2	MED	305	300	310	310	315	320	320	330	360	3475	340	335	330	330	330	330	340	340	3365	325	320	310	305	300
	CNT	28	28	27	28	28	28	28	28	28	28	27	28	28	28	28	27	27	28	28	27	27	27	27	25
	UQ	310	310	315	320	320	330	320	345	360	350	350	340	340	340	340	340	345	350	340	335	340	320	315	310
	LQ	290	295	300	300	310	310	310	330	350	335	325	320	320	320	320	325	325	330	330	320	320	310	300	295
foF1	MED												1	4	3	2	2	1							
	CNT												1												
foE	MED									2075	260	290	305	310	310	295	2775	240	195						
	CNT								4	46	27	26	27	27	27	28	66	25	23						
h'E	MED									119	109	109	105	104	105	109	109	111	U 119						
	CNT								1	27	28	27	28	28	28	28	28	28	24						
foEs	MED										29		305	305		29	28		195						
	CNT	28	28	28	28	28	28	28	28	48	28	27	28	28	28	28	27	28	28	28	48	28	28	28	28

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. FEBRUARY, 1962

TABLE 3

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	29	30	29	295	U 24	21	U 21	38	605	74	89	102	115	126	1275	1159	955	82	63	43	345	35	345	32
	CNT	24	24	26	26	26	25	26	28	28	28	28	27	27	27	28	28	28	28	28	28	28	27	26	26
	UD	34	34	37	35	30	28	23	42	66	79	97	107	123	140	138	129	110	90	72	52	40	39	40	35
	LQ	25	26	27	27	19	18	18	35	56	66	80	87	84	92	102	93	78	66	60	38	29	31	31	30
h'F2	MED										280	285	305	300	2925	270	260	245	E 240						
	CNT										12	20	25	26	28	28	27	25	21						
	UQ										290	295	330	315	310	290	270	225	245						
	LQ										270	265	270	280	280	280	255	240	235						
h'F	MED	2525	2475	245	2275	2175	240	E 270	245	230	210	E 205	210	205	210	215	215	220	225	215	205	E 220	250	240	U 235
	CNT	28	28	28	28	28	25	25	28	28	28	28	28	27	25	24	25	26	27	28	28	28	27	27	28
	UQ	270	270	260	250	240	280	310	255	240	230	220	220	220	220	230	230	225	230	225	215	230	270	245	260
	LQ	230	235	230	200	200	210	240	235	210	190	190	195	195	190	200	200	210	220	210	205	210	235	225	225
M(3000)F2	MED	300	320	330	3475	3425	3175	U 300	330	3425	320	305	300	305	315	3225	330	335	345	360	360	320	310	330	320
	CNT	23	20	23	24	24	20	21	28	28	28	28	27	27	27	26	28	27	28	27	28	28	27	25	25
	UQ	325	340	355	380	360	350	310	340	350	335	330	325	325	320	330	335	340	355	380	370	350	315	340	340
	LQ	290	310	305	325	320	290	280	320	320	305	290	285	295	300	310	320	330	335	355	345	305	300	320	310
foF1	MED											450	460	460	470	465	435								
	CNT											5	20	20	21	18	10	1							
foE	MED								145	230	Q 2825	3125	330	U 340	U 345	340	320	295	245	190					
	CNT	1				1	2	2	11	25	26	26	25	25	23	21	21	23	20	11	1	4			
h'E	MED							E 165		109	106	103	103	E 104	105	105	105	105	109	E 128					
	CNT	1				1		2	11	25	26	27	27	28	25	26	25	29	23	8		1			
foEs	MED	18	155	17	20	19	23	215	23	245	21	-	35	38	36	365	36	33	28	23	21	225	215	22	20
	CNT	28	28	28	28	28	28	28	28	28	28	28	27	28	27	28	28	27	28	27	28	28	28	28	28

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS. FEBRUARY, 1962

TABLE 4

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 275	U 29	28	27	205	18	19	33	57	70	85	82	75	85	104	89	71	65	53	37	30	345	35	29
	CNT	24	27	28	27	26	25	23	31	31	31	31	31	31	31	31	31	31	30	29	29	29	30	29	29
	UD	32	32	36	32	26	20	20	36	59	77	99	88	87	103	115	106	90	76	66	42	35	40	40	34
	LQ	21	22	26	24	19	16	16	31	54	63	73	72	68	77	89	80	61	58	49	32	29	31	28	23
h'F2	MED										280	265	270	290	300	280	290	295	295						
	CNT									4	19	31	29	28	30	31	31	27	11						
	UD										280	280	270	305	330	290	270	295	295						
	LQ										265	250	250	280	295	265	245	240	230						
h'F	MED	280	265	235	230	220	E 250	U 270	250	235	220	215	205	1925	190	205	220	220	225	215	215	U 230	240	E 2225	U 2325
	CNT	26	27	31	31	28	24	25	31	31	31	31	31	30	25	20	24	28	28	26	23	21	29	28	26
	UQ	295	290	260	255	250	240	305	255	235	230	225	210	200	215	230	230	225	230	225	220	255	260	235	250
	LQ	270	240	225	215	210	220	235	240	215	200	200	200	190	180	190	210	210	220	210	200	220	230	210	210
M(3000)F2	MED	290	310	320	340	365	310	300	320	350	335	345	340	310	300	325	335	350	3625	370	360	320	335	350	320
	CNT	19	23	25	25	24	18	21	31	31	31	31	31	31	31	31	31	31	30	29	24	27	29	29	24
	UD	305	330	350	360	375	340	330	330	360	350	360	355	335	310	335	350	355	360	380	370	335	350	365	360
	LQ	280	285	310	330	315	295	290	310	340	330	340	310	285	290	310	325	335	340	360	340	305	310	330	300
foF1	MED											U 430	U 450	450	455	450	445								
	CNT										1	13	21	25	20	19	16	-							
foE	MED							U 125	U 150	220	275	305	U 325	330	U 330	3325	315	290	260						
	CNT					2	3	5	16	23	25	20	18	16	9	14	19	17	15	3			1		
h'E	MED							U 169	165	113	108	105	104	103	103	105	105	U 107	111						
	CNT					1	3	7	11	25	24	29	30	28	26	24	20	19	9	3			1		
foEs	MED	21	20	21	20	19	21	185	21	23	31	34	36	38	34	38	36	37	35	37	36	28	28	23	22
	CNT	31	31	31	31	31	31	28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS. JANUARY, 1962

TABLE 5

BRISBANE, AUSTRALIA (27.5S, 152.9E) TIME 150.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	51	U 56	U 50	43	38	40	50	56	59	62	67	70	71	73	76	78	80	78	70	64	58	55	54	54
	CNT	13	12	17	25	26	30	29	26	25	25	27	30	29	29	30	30	30	29	29	30	26	27	20	17
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	285	U 290	U 285	U 285	285	305	325	310	290	280	285	285	275	280	280	285	295	300	310	290	275	270	275	280
	CNT	13	12	17	23	26	29	29	26	24	23	27	28	29	28	29	30	30	27	29	28	25	27	19	15
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.0 MC TO 16.0 MC IN 1 MINUTE 55 SECONDS. JANUARY, 1962

TABLE 6

CANBERRA, AUSTRALIA (35.3S, 149.0E) TIME 150.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	52	48	42	38	34	33	45	50	58	57	58	60	U 64	U 62	63	62	65	67	68	68	61	56	54	51
	CNT	23	22	26	20	25	23	23	23	19	17	12	16	16	17	20	21	24	25	28	29	29	29	28	26
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	300	315	315	305	310	335	340	335	320	300	300	310	305	300	295	300	310	310	325	320	305	300	290	290
	CNT	10	8	13	12	16	17	22	19	16	12	7	11	13	11	17	20	20	22	25	23	11	9	14	11
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS. JANUARY, 1962

TABLE 7

HOBART, TASMANIA (42.9S, 147.2E) TIME 150.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 48	U 48	36	32	29	32	D 40	D 54	U 56	D 50	D 50	D 45	D 45	D 45	D 50	U 62	D 58	U 61	U 64	U 64	U 62	U 62	U 55	U 55
	CNT	21	21	20	22	19	18	14	13	15	11	8	8	8	6	8	9	10	13	17	17	15	15	18	20
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	305	315	320	315	320	330	320	335	320							330		320	335	335	340	315	300	310
	CNT	12	8	14	15	12	13	6	5	7	3	2	4		2	3	5	3	8	9	14	6	9	12	8
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.0 MC TO 16.0 MC IN 1 MINUTE 55 SECONDS. JANUARY, 1962

TABLE 8

FT. MONMOUTH, NEW JERSEY (40.4N, 74.1W) TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	245	25	30	32	335	315	285	37	55	61	665	745	755	76	705	68	66	555	46	35	29	26	23	23
	CNT	24	25	23	25	26	22	24	25	26	27	28	28	30	30	30	30	31	30	28	29	29	30	29	26
	UQ	26	30	33	36	36	33	31	38	57	66	71	80	80	81	75	72	68	60	49	40	32	27	25	24
	LQ	20	22	26	28	30	30	23	35	53	58	62	66	70	65	65	62	60	48	38	32	26	23	22	20
h'F2	MED											240	2475	240	240	2375	230								
	CNT									1	1	15	24	23	22	20	12								
	UQ											250	252	250	250	249	238								
	LQ											227	239	230	235	230	224								
h'F	MED	U 300	U 290	280	267	249	238	260	230	220	220	210	204	205	210	215	220	220	218	230	234	E 245	2645	E 300	U 310
	CNT	25	27	26	27	26	24	26	26	26	27	28	27	29	29	29	29	31	31	30	30	30	30	28	27
	UQ	325	320	300	273	253	249	280	240	225	222	220	218	218	216	220	230	229	225	241	250	260	290	316	330
	LQ	278	275	268	256	239	230	240	225	214	209	205	190	200	199	207	211	215	210	220	230	234	251	285	290
M(3000)F2	MED	300	300	300	310	310	325	340	330	360	350	3475	345	340	340	345	340	3425	335	325	330	3225	310	300	295
	CNT	19	23	20	23	24	20	23	24	26	26	28	28	30	29	29	30	30	29	27	29	28	27	23	23
	UQ	315	305	305	310	320	330	325	340	370	360	360	350	350	350	350	350	350	340	335	335	330	325	305	300
	LQ	290	290	290	300	305	320	300	320	350	340	335	340	330	325	330	335	330	325	315	320	315	300	285	280
foF1	MED											1	2	1	1										
	CNT																								
foE	MED									210	250	275	285	290	2825	270	240								
	CNT									14	17	16	14	17	18	19	14	4							
h'E	MED									U 130	118	1125	112	114	115	115	E 120	E 138							
	CNT									23	27	26	29	29	28	28	27	10							
foEs	MED											30	30	30	D 285										
	CNT	28	27	27	27	26	24	27	24	26	27	28	29	30	30	30	30	31	31	30	30	30	30	29	29

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. DECEMBER, 1961

TABLE 9

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 28	28	295	30	25	195	185	39	62	80	94	100	88	90	101	106	90	71	56	365	32	35	355	305
	CNT	26	21	22	23	19	22	24	30	31	31	31	31	31	31	31	31	31	31	31	30	31	28	30	26
	UQ	34	34	35	35	31	21	20	46	66	84	104	110	107	115	120	118	108	81	62	45	35	41	42	38
	LQ	24	25	27	23	20	17	18	38	60	71	87	88	79	80	90	89	75	63	50	34	29	32	32	24
h'F2	MED										270	270	260	260	275	280	255	240							
	CNT									3	18	29	30	29	26	27	29	22	1						
	UQ										280	280	270	270	280	295	260	250							
	LQ										265	260	250	250	260	270	250	230							
h'F	MED	U 240	E 2675	240	225	210	250	2775	245	240	230	220	210	E 2025	190	200	220	225	220	210	210	E 235	E 245	240	U 225
	CNT	24	24	28	29	28	26	28	31	31	31	31	29	28	27	24	24	23	31	31	24	23	26	27	27
	UQ	260	295	270	240	230	280	300	255	240	235	230	220	205	205	220	240	235	230	220	220	240	255	245	245
	LQ	230	240	220	215	200	210	265	240	230	220	215	200	190	180	190	210	215	220	205	200	215	235	225	220
M(3000)F2	MED	U 3125	300	330	3475	365	295	300	3325	340	330	335	345	335	3175	320	335	345	365	360	365	3075	305	335	320
	CNT	22	19	21	22	17	20	20	28	29	29	30	30	29	28	28	29	29	29	29	27	26	23	25	23
	UQ	330	320	360	360	360	325	310	340	350	340	350	355	340	330	325	345	360	370	375	370	330	330	350	360
	LQ	305	290	310	335	290	270	290	325	325	320	320	330	320	300	305	320	330	350	350	350	300	295	320	310
foF1	MED												U 455	U 480	445	U 430									
	CNT												1 6	12	10	7									
foE	MED							U 100	165	U 2475	2875	3075	325	3325	330	320	D 2975	265	U 210						
	CNT					1	3	7	25	30	28	22	23	18	14	17	18	17	11	1					
h'E	MED							U 165	U 151	111	107	105	105	105	103	105	105	U 110							
	CNT					1	3	5	15	29	31	30	28	28	23	23	21	10	3						
foEs	MED	21	20	21	20	20	20	19	22	27	31	35	35	35	36	38	35	36	32	36	33	31	24	22	21
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS. DECEMBER, 1961

TABLE 10

THULE, GREENLAND (76.0N, 68.0W) TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 29	U 27	U 23	U 29	U 265	U 26	U 265	U 31	U 39	U 33	U 39	U 46	U 48	U 49	U 53	U 49	U 49	U 35	U 445	U 35	U 29	U 34	U 29	U 25
	CNT	7	13	13	15	12	16	10	10	9	15	19	15	16	14	8	14	13	8	12	11	16	8	12	13
	UQ	34	34	33	31	31	29	32	36	48	43	48	52	56	54	61	55	51	44	47	46	39	46	31	34
	LQ	24	18	18	23	18	20	18	23	25	28	30	38	44	45	46	35	43	30	40	24	26	31	22	20
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	250	250	2545	2545	250	255	245	243	239	2375	233	230	230	2315	225	2295	238	230	235	2395	249	240	241	250
	CNT	27	24	28	28	27	27	27	19	23	28	29	30	29	28	25	28	26	27	29	28	27	27	27	24
	UQ	270	280	270	284	281	285	261	254	250	263	260	250	237	250	239	240	249	241	246	260	260	266	270	268
	LQ	240	232	240	240	238	240	229	223	227	228	220	220	221	222	214	222	220	219	220	224	230	230	240	233
M(3000)F2	MED	U 320	U 305	U 295	U 305	U 305	U 2975	U 310	U 3175	U 310	U 315	U 320	U 315	U 330	U 320	U 3175	U 3125	U 300	U 3125	U 310	U 310	U 3125	U 300	U 3025	U 305
	CNT	5	7	7	7	5	10	6	8	9	15	16	13	15	11	8	12	13	6	9	9	12	8	8	12
	UQ	330	320	305	320	325	315	315	340	340	320	330	330	335	330	320	320	320	315	320	320	320	310	310	315
	LQ	290	280	265	285	275	285	310	295	290	280	310	310	315	310	300	290	295	285	300	290	300	295	300	290
foF1	MED																								
	CNT																								
foE	MED										E	E													
	CNT									2	6	5	3	3	4	4	3								
h'E	MED										E			E	E										
	CNT									2	6	11	1225 8	6	7	4	3								
foEs	MED										27			195	44	22			22	27	27				
	CNT	29	30	30	30	30	30	30	28	28	30	30	30	30	29	28	30	29	29	29	29	29	30	30	29

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. NOVEMBER, 1961

TABLE 11

FT. MONMOUTH, NEW JERSEY (40.4N, 74.1W) TIME 75.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	26	255	28	31	29	275	25	48	62	70	76	80	80	815	78	79	75	64	51	425	33	29	27	25
	CNT	23	24	24	23	25	22	26	27	27	27	27	27	27	28	29	28	27	28	30	30	29	29	28	27
	UQ	28	29	34	34	33	32	28	52	68	75	80	84	84	84	84	84	79	70	56	46	36	32	30	30
	LQ	22	22	26	25	24	24	24	46	60	64	70	74	78	79	75	75	72	60	46	36	31	25	24	23
h'F2	MED										240	245	250	250	254	250									
	CNT									2	12	21	21	21	19	14	4								
	UQ										250	260	264	265	268	255									
	LQ										230	240	240	239	240	243									
h'F	MED	E 305	3025	292	2805	269	U 2575	U 265	U 230	225	2175	2065	2095	208	220	230	230	228	218	226	4395	253	U 280	U 2925	U 300
	CNT	27	28	27	28	26	26	27	27	29	28	28	28	28	28	29	29	28	29	30	30	29	29	30	28
	UQ	330	303	305	300	278	280	290	250	230	220	220	215	215	226	235	240	230	220	235	245	265	300	320	317
	LQ	288	288	280	266	257	250	245	225	220	208	202	198	190	205	220	224	225	212	220	230	240	269	280	289
M(3000)F2	MED	295	2975	300	300	314	320	320	340	350	350	345	335	330	3325	330	335	335	3325	320	320	320	305	2975	295
	CNT	22	24	23	21	21	19	22	26	27	27	27	27	27	28	29	28	27	28	30	29	29	29	26	26
	UQ	300	295	305	305	320	320	330	355	360	355	355	345	340	340	335	340	345	340	330	320	320	310	305	300
	LQ	290	290	295	300	300	315	310	335	345	340	335	325	325	330	330	330	335	325	315	315	300	295	290	290
foF1	MED												3	2											
	CNT													2	1										
foE	MED													2275	260	280	290	300	295	280	440				
	CNT								2					14	18	13	19	22	17	16	18	1			
h'E	MED								E					119	115	115	117	1165	115	E 140	120	125			
	CNT								7					24	26	25	27	26	28	27	25	15	1		
foEs	MED																								
	CNT	28	27	27	28	27	26	28	26	25	27	28	28	28	28	24	28	27	27	30	30	30	29	28	27

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. NOVEMBER, 1961

TABLE 12

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	31	32	31	28	23	22	22	52	74	90	105	110	113	1225	1195	111	105	85	60	48	39	38	38	36
	CNT	25	25	27	27	28	28	27	28	29	30	30	30	30	30	30	30	29	29	29	27	28	29	27	27
	UQ	38	34	37	36	26	25	25	56	80	99	111	122	136	139	140	138	116	92	69	56	48	49	50	45
	LQ	28	26	25	23	20	18	21	47	66	87	101	98	104	104	100	93	91	75	54	40	32	30	34	33
h'F2	MED									U 245	2675	270	270	275	2675	265	255	2375							
	CNT									7	20	26	28	27	30	30	17	24							
	UQ									250	270	285	280	285	280	290	260	245							
	LQ									240	260	260	260	265	260	260	250	230							
h'F	MED	240	240	E 245	215	235	275	280	245	225	220	410	205	E 2025	200	210	220	230	220	205	210	E 425	240	235	235
	CNT	28	27	27	27	28	25	24	28	29	30	28	28	28	26	25	25	26	28	27	26	27	28	27	27
	UQ	255	270	255	230	270	305	300	245	230	225	220	215	210	210	220	230	235	220	215	220	230	260	250	260
	LQ	230	220	215	205	205	215	265	240	220	210	210	195	190	190	195	200	225	215	200	205	210	230	220	220
M(3000)F2	MED	330	330	325	345	320	300	300	340	340	330	330	3225	320	3225	320	330	345	3525	355	3525	310	315	325	330
	CNT	23	23	25	27	27	27	26	28	29	30	30	30	30	30	30	30	29	28	29	26	28	28	25	25
	UQ	340	335	350	350	340	320	305	350	345	340	340	335	325	330	330	335	350	365	360	360	340	330	330	350
	LQ	300	290	305	325	290	285	290	330	325	320	315	315	315	315	315	325	330	340	340	335	300	310	315	310
foF1	MED											U 450	U 450	U 470	465										
	CNT											5	7	7	8	4	1	1							
foE	MED							75	190	255	290	315	330	U 340	U 330	325	300	260	U 410						
	CNT		1	1		1	2	7	22	42	25	26	27	25	21	24	24	23	20	1	1				
h'E	MED							E 157	E 126	109	107	107	105	105	105	105	U 105	109	U 115						
	CNT		1	1		1	2	5	20	27	27	27	26	25	47	45	22	19	9	1	1				
foEs	MED	21	20	205	21	205	20	205	265	28	32	35	36	37	37	37	35	31	29	28	29	30	26	22	22
	CNT	28	28	28	28	28	28	28	28	29	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS. NOVEMBER, 1961

TABLE [illegible]

REYKJAVIK, ICELAND (64.1N, 21.9W) [illegible] TIME

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 30	D 30	34	28	29	27	U 26	34	47	55	60	64	62	64	695	63	59	575	47	40	38	325	33	30
	CNT	2	8	4	12	15	4	12	18	23	28	26	26	20	17	26	9	24	8	2	6	4	11	8	6
	UQ	35	32	34	32	31	28	29	39	51	59	64	72	69	74	76	67	64	61	60	44	46	45	36	32
	LQ	32	27	26	24	23	23	24	30	42	50	52	54	54	52	63	56	50	45	40	34	33	31	28	30
h'F2	MED								260	2725	E 270														
	CNT								5	10	6	4	2												
	UQ								280	31	290														
	LQ								260	28	250														
h'F	MED	D 3	[illegible]	[illegible]	E 315	300	[illegible]	[illegible]	E 277	238	236	260	270	226	225	230	230	235	240	240	250	260	260	E 290	U 290
	CNT	[illegible]	[illegible]	[illegible]	16	18	16	12	18	22	24	26	25	22	25	25	25	27	26	24	22	17	11	11	8
	UQ	[illegible]	[illegible]	[illegible]	330	325	00	310	280	240	255	240	230	230	230	235	250	270	260	270	280	305	270	320	355
	LQ	[illegible]	[illegible]	[illegible]	290	280	280	260	240	220	220	220	210	210	210	220	220	230	230	230	240	245	240	250	270
M(3000)F2	MED			E 285	U 300	U 300	U 310	310	325	340	340	330	340	335	340	340	330	U 330	325	U 3175	U 330				
	CNT	4	4	8	5	10	9	12	17	21	24	25	25	20	22	22	15	19	10	8	8	2	3	2	1
	UQ			295	300	300	320	315	330	370	355	350	350	350	350	350	350	350	340	320	330				
	LQ			280	290	280	295	300	320	330	330	320	330	325	320	330	325	320	310	305	305				
foF1	MED											2													
	CNT																								
foE	MED									D 200	240	U 250	280	U 280	U 270	E 250									
	CNT									5	5	4	13	12	11	11	5	3		1		1			
h'E	MED									121	121	117	117	121	121	121									
	CNT									5	5	5	14	13	11	11	3	4		1		1			
foEs	MED	32	30																			27	30	30	30
	CNT	16	21	21	23	23	19	13	19	22	25	25	25	26	25	26	29	29	28	29	28	26	25	23	18

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS. [illegible] OCTOBER, 1961

14

MAUI, HAWAII (20.8N, 156.4W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	42	38	32	31	24	24	30	65	82	88	99	110	114	1135	124	131	133	1155	102	80	67	54	52	U 50
	CNT	24	28	24	24	27	28	29	30	29	30	31	30	30	[illegible]	[illegible]	31	31	30	30	29	29	29	29	29
	UQ	52	47	46	37	31	28	34	68	91	98	106	118	122	[illegible]	[illegible]	124	142	130	107	93	80	65	59	54
	LQ	36	31	28	25	20	21	26	60	78	82	94	100	106	104	113	121	119	109	80	54	52	47	44	38
h'F2	MED									E 245	2575	2825	2925	2875	300	300	275	260	2375						
	CNT									11	14	18	24	22	24	26	28	25	16						
	UQ									250	260	300	300	320	320	310	290	270	245						
	LQ									240	245	270	280	270	290	280	270	245	[illegible]						
h'F	MED	235	235	235	U 235	E 2525	E 265	U 285	285	225	210	210	205	205	2025	215	225	230	220	215	220	220	235	U 240	2375
	CNT	24	28	29	29	26	24	29	30	24	28	28	27	29	28	26	26	23	21	30	24	27	26	27	24
	UQ	250	250	260	260	275	280	305	240	230	220	210	210	210	210	225	230	240	230	225	230	230	250	275	260
	LQ	220	220	220	220	225	250	265	230	220	210	200	200	195	195	210	220	225	220	210	210	210	220	230	245
M(3000)F2	MED	310	325	3325	330	320	305	290	350	345	3275	3075	305	300	295	305	320	330	3375	340	330	325	300	3175	315
	CNT	27	28	28	29	29	27	28	29	28	28	30	29	30	30	29	31	33	30	30	30	23	23	28	24
	UQ	340	340	360	350	340	320	300	360	350	340	315	315	315	305	320	330	350	350	335	350	335	320	340	335
	LQ	300	305	315	290	300	280	280	335	340	315	300	295	290	290	300	310	329	330	335	320	305	290	290	300
foF1	MED													480	480	U 480									
	CNT										1	2	4	7	8	9	2								
foE	MED								2075	U 275	310	U 330	3425	350	350	U 3375	315	290	U 230						
	CNT								24	23	24	22	16	16	17	16	15	14	7						
h'E	MED								119	109	105	105	105	105	105	103	105	E 106	E 114						
	CNT							1	26	28	27	26	27	27	25	23	20	12	6						
foEs	MED	26	28	24	24	225	25	22	245	33	37	37	D 375	39	385	U 40	39	37	41	375	36	32	30	33	28
	CNT	29	30	29	30	30	30	30	30	30	30	31	30	30	30	29	31	31	30	30	29	29	29	29	29

SWEEP 0.25 MC TO 20.0 MC IN 27 SECONDS. OCTOBER, 1961

TABLE 15

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED		U 325		U 285	U 26	U 26	32	42	46	51	545	57	595	575	59	565	57	505	495	U 50	D 43	D 45	U 40	D 38
	CNT	1	2	1	4	5	7	13	18	17	16	20	20	18	18	19	20	24	22	22	9	5	6	3	2
	UQ				30	32	31	36	45	50	54	58	62	63	63	63	60	60	57	55	56	51	49	41	
	LQ				28	24	23	30	40	42	46	49	52	55	54	57	52	50	47	46	41	40	42	40	
h'F2	MED									U 2725	310	295		280	300	300	E 295	3075	E 315	E 320					
	CNT								2	6	13	16		16	11	11	10	10	10	5					
	UQ									280	350	300		295	340	335	340	340	360	350					
	LQ									260	270	275		270	275	270	280	280	280	295					
h'F	MED				U 320	U 290	E 300	E 2675	E 250	U 230	220	210	210	U 210	200	U 220	225	E 2375	E 240	250	250	E 280	U 270	U 300	
	CNT	1	4	4	6	5	7	14	17	17	17	19	18	14	15	13	14	18	15	17	12	9	8	7	4
	UQ				340	340	300	300	260	260	235	230	210	220	230	230	235	250	260	280	270	305	305	310	
	LQ				320	265	250	260	230	220	210	200	200	200	200	200	210	230	230	240	250	245	250	270	
M(3000)F2	MED							330	340	330	330	3175	325	330	320	320	320	315	320	320	U 320				
	CNT	1	2		3	2	4	13	17	16	14	18	19	18	17	18	18	21	18	17	6	1	3		1
	UQ							335	340	340	340	330	335	345	330	330	330	330	330	320	340				
	LQ							310	315	320	320	310	315	325	310	310	310	300	310	310	320				
foF1	MED										U 395														
	CNT									1	8	4		3	3	1	1	1							
foE	MED										D 250	275		D 270	290	U 2863	290								
	CNT								1	1	3	8	9	8	8	6	5	3	2						
h'E	MED											110	115	109	111	110	111								
	CNT								1	1	3	8	9	8	8	6	5	3	2						
foEs	MED	405	41	40		30																30	32	34	365
	CNT	10	15	13	12	11	9	14	18	17	17	20	20	18	17	19	18	23	24	24	16	17	14	14	10

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS. SEPTEMBER, 1961

TABLE 16

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	49	46	44	375	32	31	335	66	74	80	88	98	1045	1115	116	122	127	124	1145	94	715	65	U 57	D 505
	CNT	25	24	27	28	29	29	28	29	29	30	30	30	30	30	30	29	29	28	28	29	28	29	28	26
	UQ	58	50	50	40	35	32	36	72	82	85	95	105	112	119	123	128	132	134	130	108	80	72	63	59
	LQ	42	40	38	34	26	26	31	59	69	72	82	90	101	105	109	110	114	106	98	78	66,	54	49	48
h'F2	MED								U 2525	E 250	280	3025	335	335	330	320	310	280	255	2425					
	CNT								6	13	11	16	24	29	30	29	27	29	27	14					
	UQ								260	260	290	330	370	350	340	340	325	300	275	250					
	LQ								230	230	260	290	310	320	320	300	290	270	245	230					
h'F	MED	255	250	240	230	260	E 2675	2725	240	220	210	205	2025	205	210	210	215	225	230	230	2225	E 225	2425	U 260	E 2725
	CNT	28	29	29	29	28	28	28	29	30	30	29	28	28	28	25	25	24	22	22	28	27	28	27	28
	UQ	275	260	260	240	280	285	290	245	225	215	215	205	210	220	225	225	230	235	235	230	230	265	285	280
	LQ	240	235	230	215	240	255	260	235	215	205	195	195	200	205	200	210	220	220	220	215	215	230	240	260
M(3000)F2	MED	310	320	325	340	300	295	300	335	335	305	2775	2725	2825	2875	290	305	320	335	340	3425	315	3025	285	290
	CNT	23	24	26	26	29	28	28	28	29	29	30	30	30	30	30	29	29	28	28	29	26	22	22	24
	UQ	320	330	335	360	320	315	310	350	350	320	300	290	290	290	305	310	330	340	350	355	325	315	295	310
	LQ	290	310	310	320	290	280	285	320	310	275	260	270	275	280	285	290	310	315	330	330	305	290	280	285
foF1	MED												495	510	500	U 490	480								
	CNT									1	1	2	12	14	9	11	8	2							
foE	MED								225	285	3175	U 340	360	370	3725	3575	340	305	260	1825					
	CNT					4	1	3	19	17	10	11	12	14	14	20	19	20	13	8					
h'E	MED								113	109	107	106	107	107	107	107	105	107	109	117					
	CNT					3	1	4	26	30	30	28	28	29	29	28	27	24	22	5					
foEs	MED	20	20	18	17	13	D 9	13	24	32	36	38	40	40	40	40	38	35	34	35	36	25	25	22	21
	CNT	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29	29

SWEEP 0.25 MC TO 20.0 MC IN 31.5 SECONDS. SEPTEMBER, 1961

TABLE 17

FAIRBANKS, ALASKA (64.9N, 147.8W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	U 39	U 40	U 40	U 425	47	47	47	485	50	53	50	51	52	53	53	515	53	51	515	485	47	45	44	42
	CNT	10	11	11	10	11	13	13	16	15	15	16	20	19	19	20	20	21	20	20	18	17	16	14	11
	UQ	47	46	47	45	49	49	53	52	55	58	56	58	58	57	56	56	56	56	56	55	52	48	50	46
	LQ	37	34	35	40	42	44	44	47	46	46	46	46	45	49	49	49	48	48	48	46	41	40	38	39
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED																								
	CNT										2	3	3	2	1	1									
	UQ																								
	LQ																								
fo F1	MED																								
	CNT																								
fo E	MED																								
	CNT																								
h'E	MED																								
	CNT																								
fo Es	MED	305	345	32	41	37	41	20	255		30									24	21		32	25	36
	CNT	20	20	17	18	19	16	18	18	17	13	16	20	20	17	20	21	21	20	21	21	20	21	21	20

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. AUGUST, 1961

TABLE 18

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MEQ	65	U 63	60	52	48	44	44	64	67	71	79	88	101	107	112	116	123	122	125	114	89	73	69	68
	CNT	29	30	29	29	29	29	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	29	29
	UQ	74	75	71	62	55	50	53	66	74	76	86	99	111	118	120	122	127	133	135	127	98	85	78	74
	LQ	56	55	50	46	34	35	34	50	60	63	72	81	92	101	105	103	112	111	112	94	75	65	58	56
h'F2	MEQ								473	2625	350	3925	4225	405	380	360	340	320	290	260					
	CNT							1	14	17	15	24	26	31	31	31	31	31	31	31					
	UQ								285	315	380	450	445	420	400	370	360	335	300	270					
	LQ								240	250	290	360	390	380	350	335	330	305	275	250					
h'F	MEQ	E 285	270	U 265	250	E 255	245	260	230	215	205	195	195	205	210	215	220	230	235	U 240	2325	E 225	U 245	E 2725	E 280
	CNT	31	31	31	31	31	31	31	31	28	25	24	23	25	22	21	23	21	12	11	30	30	27	28	28
	UQ	300	285	285	270	280	290	270	235	220	210	200	210	215	225	220	230	240	235	245	240	235	260	290	290
	LQ	265	260	235	230	240	230	245	220	205	190	190	190	195	205	210	210	220	220	235	225	215	225	255	275
M(3000)F2	MEQ	240	U 2475	300	305	3075	320	320	320	320	280	255	250	260	270	275	285	295	310	325	335	315	290	285	290
	CNT	28	30	28	29	28	29	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	27	29
	UQ	300	305	305	320	320	330	335	340	335	300	270	265	270	280	290	290	305	320	335	350	335	300	300	300
	LQ	280	285	285	290	280	285	310	310	285	255	240	240	250	260	270	275	285	300	315	325	305	280	280	280
fo F1	MED									430	460	520	520	510	510	490	485	U 470							
	CNT								1	6	12	21	24	29	30	28	26	18	3						
fo E	MED							125	240	U 340	320	355	370	360	370	370	350	325	4875	230					
	CNT					1	1	5	24	23	23	19	19	20	23	26	29	29	30	15	1				
h'E	MEQ							115	111	107	107	105	105	107	107	105	107	107	U E 109	117					
	CNT					1	1	13	25	29	31	31	29	31	27	28	28	27	27	18					
fo Es	MEQ	27	28	28	17	20	21	21	26	36	40	41	43	43	43	42	41	41	40	40	38	34	32	30	30
	CNT	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 0.45 MC TO 20.3 MC IN 31.5 SECONDS. AUGUST, 196.

TABLE 19

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 150W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	U 52	U 475	U 34	U 40	U	U	U	U	U 49	J 475	495	54	53	53	54	53	535	53	50	50	49	U 50	U 45	U 48
	CNT	1	2	3	4					5	8	10	10	11	11	13	15	16	15	17	15	12	6	4	4
	UQ			38	42	45	42	46	49	52	51	52	53	56	54	56	55	54	54	54	53	50	51	48	49
	LQ			35	38	39	37	39	48	44	43	48	49	52	51	52	50	50	51	49	48	46	45	43	43
h'F2	MED					J 390	400	U 400	385	U 365	365	E 400	385	365	350	330	U 320	U 345							
	CNT				1	4	8	7	5	9	10	10	10	12	12	13	9	6	1						
	UQ					430		410	400	400	410	410	420	405	400	360	325	360							
	LQ					325	325	340	350	340	360	380	360	340	320	310	290	320							
h'F	MEQ					E 300	U 240			E 240	U 220	U 210	U 210	U 210	U 210	E 220	U 210	E 235	U 226	E 2375	U 260		U 290		
	CNT	1	1	4	4	4	4	4	4	6	9	8	8	10	14	9	8	10	9	12	9	4	5	4	4
	UQ					360	255			250	220	215	220	230	225	220	220	230	230	230	225		315		
	LQ					275	235			230	205	205	200	200	200	200	200	220	215	230	220		270		
M(3000)F2	MED					U 300	U 280	L	U 2925	U 290	U 300	U 280	U 285	U 290	U 300	U 290	U 310	U 300	U 3075						
	CNT			1	2	4	7	5	4	5	8	8	7	9	9	9	11	11	14	14	12	8	9	1	2
	UQ					330	305			340	320	310	300	310	305	295	310	310	310	315	310	310	320		
	LQ					290				295		290	280	290	280	280	280	285	280	290	300	300	300		
fo F1	MEQ									400	420	420	430	440	440	430	430	420	410	400					
	CNT					1	2	1	2	6	4	8	8	10	7	9	7	10	8	9	1				
fo F	MEQ																								
	CNT								1	1	2						2		1		1	1	1	1	
h'E	MEQ																								
	CNT								1	1									1		1	1	1	1	
fo Es	MEQ	U 38			E 36																	U 37			307
	CNT	5	3	6	7	9	6	4	2	7	10	8	8	11	10	11	12	14	15	17	14	10	7	7	10

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS. JULY, 1961

TABLE 20

MAUI, HAWAII (20.8N, 156.5W) TIME 150.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	665	615	62	52	47	46	44	61	62	63	69	77	88	93	101	106	1115	114	108	99	82	76	71	70
	CNT	28	30	29	29	28	29	30	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	24
	UQ	73	72	68	60	56	51	56	65	71	69	79	86	96	102	110	112	120	128	118	110	92	88	85	77
	LQ	55	54	50	46	41	35	40	53	55	55	62	69	75	83	87	91	104	99	100	88	71	69	60	58
h'F2	MED								300	310	450	455	480	425	400	380	360	335	295	280					
	CNT								11	15	21	25	29	31	31	31	31	31	31	31					
	UQ								360	495	580	575	515	470	430	415	380	345	325	290					
	LQ								265	290	310	400	430	385	375	355	340	320	290	260					
h'F	MED	285	275	255	270	275	270	265	240	215	205	200	200	200	200	210	220	225	230	235	240	240	255	280	290
	CNT	31	31	31	31	31	29	31	30	27	25	25	25	26	24	22	23	21	24	25	29	30	31	30	31
	UQ	305	290	275	295	300	290	280	250	230	215	210	210	205	215	215	220	235	230	240	250	255	280	300	315
	LQ	270	255	230	240	240	250	255	225	210	200	195	190	195	195	200	205	215	220	230	235	230	245	265	270
M(3000)F2	MED	280	2925	290	290	290	290	3075	310	300	265	240	245	255	265	265	275	285	305	310	3225	300	4825	280	280
	CNT	27	28	27	28	25	27	30	31	31	31	31	31	31	28	31	31	30	29	31	30	30	30	31	29
	UQ	290	310	290	305	305	310	320	325	310	290	250	250	265	270	275	280	295	310	320	330	310	295	290	290
	LQ	275	280	280	280	270	280	295	300	270	235	235	235	240	255	255	260	280	290	300	305	285	275	270	270
fo F1	MED									420	455	490	500	490	490	480	470	460	430						
	CNT								3	11	18	23	27	29	29	28	28	26	16	1					
fo E	MED								240	U 295	325	350	360	370	370	370	350	320	295	2375					
	CNT				1			3	15	25	19	16	16	14	19	23	23	23	21	6	1				
h'E	MEQ							114	111	107	107	107	107	107	107	107	107	108	111	115					
	CNT				1	1	2	12	27	29	29	30	29	26	24	30	27	26	26	24	4				
fo Es	MED	28	27	26	24	21	18	21	30	42	41	43	42	43	435	43	42	40	345	34	34	34	28	32	30
	CNT	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	30	31	31	31	31	31	31

SWEEP 0.45 MC TO 20.0 MC IN 31.5 SECONDS. JULY, 1961

TABLE 21

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	U 465	U 45	445	U 44	44	46	47	49	50	52	54	56	555	55	56	565	555	56	53	53	50	U 51	485	U 48
	CNT	8	9	10	8	14	15	21	21	21	23	24	24	24	29	27	28	28	27	29	27	26	23	14	6
	UQ	48	50	46	47	47	49	50	53	54	56	57	58	58	58	58	59	58	58	58	57	56	55	56	61
	LQ	45	43	43	41	42	44	44	48	47	49	50	53	53	51	53	54	52	50	48	50	47	47	45	44
h'F2	MED					E 385	340	360	3625	360	390	3725	380	375	400	395	380	380	350	350	330	U 330			
	CNT	1	1	2	3	8	10	14	16	19	21	22	23	23	29	26	27	25	26	23	15	6	3	1	
	UQ					442	370	405	400	400	435	440	410	400	435	420	430	415	390	370	350	350			
	LQ					350	310	330	320	330	330	340	350	350	350	340	330	350	320	310	300	310			
h'F	MED	E 295	E 340	U 300	E 300	U 280	E 2575	240	E 2275	220	210	220	U 210	U 210	210	E 220	U 220	E 230	E 240	E 270	E 265	E 270	E 300	U 290	E 300
	CNT	8	9	7	5	7	10	16	23	20	21	21	21	23	29	24	23	21	19	19	18	16	23	14	6
	UQ	375	350	370	315	330	270	255	240	230	225	230	230	230	230	230	230	250	250	300	300	300	320	320	300
	LQ	270	270	280	295	260	240	230	210	210	200	210	200	200	200	210	200	220	220	240	230	255	270	280	270
M(3000)F2	MED	U 290	U 300	U 300	U 300	290	300	300	295	300	2925	300	290	290	290	285	2875	290	300	300	305	310	310	U 300	
	CNT	5	6	7	7	13	15	19	21	19	22	20	23	24	29	26	26	26	26	26	24	18	19	9	3
	UQ	310	300	300	310	305	310	305	310	315	310	310	305	305	300	310	310	300	310	310	320	320	320	310	
	LQ	270	290	290	290	275	285	280	280	285	285	280	280	280	270	280	290	275	280	290	300	300	300	300	
fo F1	MED							380	400	420	435	440	450	450	450	450	445	435	420	420					
	CNT						1	7	11	17	20	21	21	22	28	23	22	20	17	11	2				
fo E	MED							280	300									D 300			U 320				
	CNT					2	3	5	6	4	2	3					1	5	1	1	5	2		2	
h'E	MED						111	103	110									109	109		U 117	119			
	CNT		1	1		2	5	5	6	4	3	4	2	1			1	5	5	3	6	5	2	3	2
fo Es	MED				42															34					45
	CNT	12	15	12	13	15	16	21	21	20	23	23	23	24	29	26	28	28	28	30	26	24	27	22	13

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS. JUNE, 1961

TABLE 22

MAUI, HAWAII (20.8N, 156.5W) TIME 10.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	72	67	62	U 58	U 545	50	48	58	67	74	83	90	99	105	108	110	112	112	107	955	865	77	735	715
	CNT	28	28	28	29	30	30	30	30	29	27	29	30	30	30	30	30	30	30	30	30	30	30	30	28
	UQ	76	71	66	64	62	56	53	63	72	81	88	95	106	111	115	120	122	121	117	103	91	85	78	80
	LQ	64	64	56	54	42	43	43	53	60	66	72	84	92	93	98	101	104	99	96	91	78	70	68	68
h'F2	MED							U 275	280	440	420	445	4175	390	370	355	335	310	295	270					
	CNT							7	11	19	23	27	30	30	30	30	30	30	29	26					
	UQ							395	455	535	475	470	445	445	390	370	360	345	305	280					
	LQ							250	260	345	350	405	395	370	345	340	320	300	280	260					
h'F	MED	E 285	U 280	E 2675	U 260	270	E 280	255	235	215	200	205	200	2025	210	2075	2175	2175	220	E 235	250	250	U 260	U 280	E 290
	CNT	30	30	28	27	27	28	27	27	23	23	24	21	26	24	24	22	18	16	16	28	29	29	29	29
	UQ	295	285	285	290	295	300	260	235	220	215	215	210	215	215	220	225	230	230	240	260	260	285	300	300
	LQ	270	260	255	245	250	265	245	225	205	200	190	190	195	195	200	210	210	210	230	235	230	250	265	265
M(3000)F2	MED	290	2925	300	U 2925	U 290	U 290	3025	300	255	2425	250	255	265	2725	280	290	300	305	3175	3125	305	285	280	285
	CNT	28	28	28	28	30	30	30	29	29	26	29	30	29	30	30	29	30	30	30	30	30	30	29	28
	UQ	305	305	315	310	305	300	320	330	270	260	255	265	275	280	285	295	305	310	330	325	315	295	290	290
	LQ	280	280	290	280	280	280	285	270	240	235	240	245	255	265	270	275	290	300	295	290	290	275	280	280
fo F1	MED									435	475	490	490	490	490	480	470	460	U 430						
	CNT							4	3	16	24	26	25	27	29	29	28	25	14	1					
fo E	MED							180	U 255	U 300	U 330	O 3525	D 3675	380	3775	3675	350	330	290	U 225					
	CNT							6	21	20	21	18	16	16	18	20	22	23	21	5					
h'E	MED							E 128	111	107	107	105	105	107	107	107	107	107	109	115					
	CNT							8	28	29	29	30	28	27	29	28	27	28	27	15	3				
fo Es	MED	265	27	32	28	23	185	235	325	45	53	43	555	435	44	42	41	43	425	395	38	325	31	31	335
	CNT	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. JUNE, 1961

TABLE 23

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	U 45	U 44	U 41	U 41	U 39	41	455	48	49	54	55	55	55	53	555	54	53	53	53	505	51	485	U 51	U 53
	CNT	2	2	1	4	9	14	14	15	17	18	19	20	24	29	28	28	29	28	28	28	22	14	4	3
	UQ				44	43	46	44	55	55	56	56	58	58	58	57	58	56	56	56	54	54	55	56	54
	LQ				40	37	39	43	45	47	49	50	52	51	48	50	50	52	50	50	48	48	44	46	51
h'F2	MED							U 310	U 350	350	355	E 365	400	395	430	440	390	370	365	340	310	U 330			
	CNT					1	2	6	7	12	14	18	19	24	27	22	23	23	17	19	18	5		1	
	UQ							340	360	415	400	410	430	425	390	440	400	400	395	390	320	365			
	LQ							300	350	335	330	340	370	355	370	370	395	350	335	330	300	300			
h'F	MED				U 340	E 3675	E 290	E 260	E 260	U 240	U 4375	220	E 2325	U 230	U 230	U 240	E 240	E 250	E 255	E 265	U 270	E 290	300	U 310	U 300
	CNT	4	3	1	5	8	10	8	13	17	14	15	16	17	21	21	14	20	18	14	7	11	11	8	6
	UQ				405	390	330	270	275	265	250	230	245	245	250	260	260	265	270	280	290	350	330	340	360
	LQ				320	305	270	240	240	230	230	210	220	220	220	225	225	235	240	250	250	280	290	295	300
M(3000)F2	MED					U 290	305	310	300	290	2925	300	285	290	275	280	280	290	290	2975	305	300	U 305		
	CNT	1	1		3	7	11	12	13	16	16	19	19	24	28	26	26	25	25	26	21	14	10	1	
	UQ					300	315	310	310	300	305	310	300	300	300	290	295	300	300	305	310	310	310		
	LQ					270	300	290	285	280	290	280	270	270	255	265	265	275	280	290	300	290	300		
fo F1	MED								390	410	430	435	445	440	440	440	430	430	405	U 400					
	CNT							1	6	11	9	12	16	17	20	20	17	15	6	5					
fo E	MED																								
	CNT				1				3	1	1							1					1		
h'E	MED																								
	CNT				1				3	1	1							1		1	1	2	1		
fo Es	MED		U 42																						
	CNT	8	5	3	8	10	13	12	14	17	17	20	19	24	28	26	26	25	28	29	26	17	17	13	9

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS. MAY, 1961

TABLE 24

MAUI, HAWAII (20.8N, 156.5W) TIME 10.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	68	64	57	52	49	45	48	585	65	76	835	94	100	111	115	121	124	124	118	108	90	82	77	71
	CNT	28	28	27	27	27	30	31	30	30	31	30	31	31	31	31	31	31	31	31	31	31	31	29	30
	UQ	75	73	67	64	58	52	53	67	73	84	90	100	111	118	121	128	130	131	127	123	100	88	84	80
	LQ	59	56	50	47	42	40	45	55	63	67	77	86	98	104	106	111	106	104	104	98	83	68	64	59
h'F2	MED								U 280	U 290	3625	380	390	370	345	3325	320	300	285	265					
	CNT							1	7	9	20	27	28	31	31	30	31	31	31	25					
	UQ								330	335	410	445	410	385	370	340	330	310	300	280					
	LQ								260	260	310	345	370	355	320	310	310	290	270	250					
h'F	MED	E 280	265	255	260	270	275	250	230	215	205	E 2025	200	200	200	E 210	215	220	230	245	240	E 235	E 2525	E 2725	E 285
	CNT	31	31	31	31	31	31	31	28	27	26	26	26	25	25	24	22	21	19	23	31	29	30	28	29
	UQ	290	280	265	285	295	295	260	235	225	215	210	205	210	210	230	230	230	240	255	250	255	270	290	295
	LQ	265	240	245	245	255	255	240	220	210	200	195	190	190	190	200	205	220	225	230	230	220	240	260	270
M(3000)F2	MED	290	300	310	300	290	295	310	310	2875	260	255	265	270	285	290	300	305	315	315	320	305	290	2875	290
	CNT	27	28	27	26	27	30	31	30	30	31	29	31	31	31	30	31	31	31	31	31	31	31	28	30
	UQ	305	320	320	310	305	310	330	330	285	295	300	305	315	325	330	330	310	300	295	295	295	280	280	280
	LQ	280	290	295	290	280	280	295	290	270	250	245	255	265	275	285	290	300	300	305	315	295	280	280	280
fo F1	MED								1	U 430	490	490	495	500	490	490	480	460							
	CNT								1	5	15	24	26	26	28	25	28	20	1	1					
fo E	MED							U 160	2475	295	U 330	U 350	365	U 370	U 370	360	345	3175	280						
	CNT							11	20	22	17	17	12	15	17	17	17	20	20	3			1		
h'E	MED							149	113	107	107	107	105	105	107	107	105	107	109	115					
	CNT							15	31	31	31	31	31	31	31	31	31	28	25	13	4				
fo Es	MED	25	24	22	19	18	16	195	28	36	41	405	45	43	42	42	42	41	37	38	37	28	30	27	26
	CNT	31	31	31	31	31	31	30	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. MAY, 1961

TABLE 25

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 45	U 415	U 38	U 34	U 345	U 38	41	46	50	505	53	56	59	60	60	61	585	565	51	50	U 49	U 48	U 44	U 44
	CNT	1	2	1	2	4	9	13	18	18	18	19	20	23	23	25	24	24	24	26	20	18	8	8	1
	UQ					42	44	43	49	54	56	60	59	65	65	64	64	63	61	60	58	55	56	45	
	LQ					31	36	40	43	46	48	48	50	54	55	55	56	55	50	49	48	45	43	42	
h'F2	MED							U 320		U 3375	350	370	3825	365	370	370	350	330	325	U 3275					
	CNT							2 6		8	11	13	16	21	18	19	17	18	15	8	2				
	UQ							375		375	400	430	395	400	400	430	380	360	380	400					
	LQ							300		320	335	320	355	310	330	320	305	300	295	310					
h'F	MED						E 320	E 300	U 270	U 250	U 240	U 2325	235	E 240	E 235	E 250	E 260	E 250	E 270	E 270	280	E 300	U 300	E 365	
	CNT	1	2	2	2	4	9	12	13	15	15	16	16	17	16	18	15	14	15	19	16	15	7	8	2
	UQ						350	315	295	270	260	245	250	265	260	270	260	255	290	310	300	260	260	400	
	LQ						300	280	265	250	230	220	225	220	230	240	240	240	260	250	260	260	260	330	
M(3000)F2	MED						U 310	320	3075	310	295	300	290	2925	2975	295	300	310	3075	310	310	320	U 300	U 300	
	CNT	1	2	1	2	3	8	12	16	16	17	17	19	20	20	21	19	20	22	25	15	11	5	5	1
	UQ						320	330	325	310	310	310	305	310	310	310	310	310	315	320	320	335	325	315	
	LQ						300	295	300	295	290	280	280	280	285	280	280	290	290	290	310	300	290	285	
foF1	MED									U 390	405	430	435	430	435	440	430	420							
	CNT							1	2	5	8	9	12	15	10	13	6	7	4	1					
foE	MED																								
	CNT							1	1	1	1				1	1	1	1	1	2	2	2			
h'E	MED																								
	CNT							1	1	1	1				1	1	1	1	2	2	3	2			
foEs	MED		U 42		U 57																				U 46
	CNT	3	5	4	6	6	9	12	17	17	17	19	20	22	21	21	19	20	22	26	18	20	14	12	6

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS.

APRIL, 1961

TABLE 26

WHITE SANDS, NEW MEXICO (32.3N, 106.5W) TIME 105.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	42	43	435	43	41	41	50	60	645	70	73	81	88	93	97	94	89	83	77	72	57	485	45	43
	CNT	27	29	30	27	30	30	30	30	30	29	29	29	24	28	28	28	28	28	29	30	29	28	25	27
	UQ	46	47	47	45	43	42	52	68	70	74	78	88	96	102	99	98	94	88	85	75	60	51	50	47
	LQ	39	40	39	38	38	36	46	55	59	63	66	74	81	90	88	87	81	76	72	66	52	45	40	40
h'F2	MED								330	310	335	347	350	348	338	329	3125	304	290						
	CNT							1	11	19	24	25	29	29	28	28	28	25	15						
	UQ								420	360	384	375	392	377	366	349	335	320	300						
	LQ								290	291	302	314	310	300	292	280	270	266	285						
h'F	MED	320	315	3025	300	2925	3015	269	240	2265	213	210	205	218	219	230	235	240	240	265	248	242	U 264	295	322
	CNT	28	30	30	30	30	30	30	30	30	28	29	29	29	28	27	28	28	26	29	30	29	28	26	28
	UQ	336	330	330	320	310	320	284	251	240	230	220	226	223	228	240	249	254	252	273	258	250	289	330	338
	LQ	290	290	280	280	270	270	250	230	210	205	200	191	203	206	210	220	227	228	240	220	227	249	267	288
M(3000)F2	MED	265	270	275	280	275	275	3125	310	300	295	285	270	270	2775	2775	290	2975	305	310	3125	300	280	2725	270
	CNT	26	29	29	27	30	29	30	30	30	29	29	29	29	28	28	28	28	28	29	30	29	27	24	25
	UQ	285	280	290	290	285	290	320	330	320	300	295	285	290	300	300	310	310	320	330	330	315	295	295	290
	LQ	260	260	265	265	270	270	300	290	290	270	270	270	265	270	270	280	285	300	300	305	290	270	260	260
foF1	MED								2	3	455 12	475 8	490 19	490 21	485 20	465 12	3	2							
foE	MED							U 190	250	U 295	U 320	U 340	U 360	U 355	U 360	340	330	300	250						
	CNT					1	1	13	22	18	15	12	8	12	17	17	21	21	14	3					
h'E	MED							E 138	115	111	110	110	110	110	110	110	110	110	116	E 131					
	CNT					1	1	17	29	30	29	28	28	29	25	25	26	26	24	13					
foEs	MED	28	30	30	30	30	30	28	30	30	29	29	29	29	28	355 28	35 28	315 28	285 28	D 21 28	20 30	19 29	29	27	28

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

APRIL, 1961

TABLE 27

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED						U 42	U 455	U 45	U 49	55	59	62	64	65	64	62	U 60	585	535	U 515	U 50	48	U 51	
	CNT						2	2	4	53	59	64	65	68	70	68	69	65	61	58	54	3	3	1	
	UQ								47	53	59	64	65	68	70	68	69	65	61	58	54	50	50		
	LQ								39	43	52	54	56	57	60	59	57	58	54	46	48	46	46		
h'F2	MED											E 285	E 290	E 290	E 300	E 295	U 300								
	CNT										3	6	8	13	9	12	9	3							
	UQ											300	310	335	315	315	330								
	LQ											270	275	260	255	280	270								
h'F	MED								E 270	U 260	U 260	U 245	E 240	U 240	E 240	E 260	E 255	250	U 250	U 260	U 2675	E 300	U 320		
	CNT						2	2	7	15	18	16	16	18	18	25	22	25	25	13	10	5	6	1	1
	UQ								260	280	280	270	260	260	250	270	280	280	280	285	330	345	340		
	LQ								260	240	240	230	230	235	230	240	240	240	240	245	260	470	320		
M(3000)F2	MED								U 340	U 340	340	330	335	320	325	320	320	330	335	320	U 330				
	CNT						2	1	7	14	15	18	22	23	22	21	23	18	12	7	5				
	UQ								340	350	350	340	350	340	340	330	330	335	340	330	340				
	LQ								325	330	325	320	320	310	310	310	310	320	330	320	320				
foF1	MED											1		1	2	1									
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT	2					2	2	7	15	20	20	22	25	22	26	28	28	27	16	12	7	8	4	3

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS.

MARCH, 1961

TABLE 28

REYKJAVIK, ICELAND (64.1N, 21.8W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED						U 445	U 45	U 41	39	475	58	60	64	64	61	62	60	55	51	47	U 49	U 475		
	CNT						2	5	6	11	20	20	25	27	27	26	25	23	18	11	5	3	4		
	UQ							46	44	43	48	62	68	75	71	69	65	65	60	54	52	49	52		
	LQ							40	38	38	44	50	51	57	59	57	52	50	49	44	45	48	45		
h'F2	MED											1		1	1										
	CNT																								
	UQ																								
	LQ																								
h'F	MED									E 280	250	240	240	240	240	250	2475	235	240	250	U 2725				
	CNT						2	4	3	9	20	19	23	21	25	29	24	21	18	13	8	4	3	1	2
	UQ									315	260	260	265	265	265	270	280	250	250	300	305				
	LQ									265	245	240	230	230	230	230	240	230	230	240	250				
M(3000)F2	MED									U 340	340	340	340	340	340	340	335	350	U 3475	315	U 330				
	CNT						1	3	3	9	20	19	22	21	24	24	23	19	14	8	5	2	1		
	UQ									340	350	350	360	350	350	350	350	340	335	350	350				
	LQ									315	330	330	325	320	325	320	325	340	335	300	315				
foF1	MED												1	1											
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	U 57		U 49		U 50																U 46	U 49	U 57	
	CNT	5	6	3	5	3	4	5	3	9	20	19	23	21	25	25	24	21	19	15	13	7	9	3	7

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS.

FEBRUARY, 1961

TABLE

REYKJAVIK, ICELAND (64.1N, 21.9W) TIME 15.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 50		D 42	U 40	U 465	U 44	U 44	U 40	U 38	42	53	66	72	76	685	645	54	535	U 45	50	U 475	U 40	U 54	
	CNT	1		1	2	2	5	5	6	5	11	23	25	27	29	26	24	26	14	7	7	2	1	2	
	UQ						47	46	42	40	43	56	72	83	82	77	71	65	57	49	53				
	LD						41	39	39	35	40	48	60	65	63	59	56	52	48	42	40				
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED					E	U			E										U	U				
	CNT	4	1	1	2	1	300	290	3	3	280	240	230	230	220	220	225	230	240	255	280	4	1	3	
	UQ						5	5			10	23	43	26	28	25	25	23	14	8	6				
	LD						320	300			300	260	240	235	230	240	240	240	230	260	280				
							280	280			260	230	220	220	215	210	220	220	220	245	250				
M(3000)F2	MED				2	1	4	U 5	3	2	330	340	350	350	350	350	350	U 350	U 335	U 340	U 335	2	1	2	
	CNT							320			10	23	22	26	27	22	21	18	11	5	5				
	UQ							320			340	360	355	360	360	355	360	360	350	340	350				
	LD										315	330	340	340	340	330	340	340	325	320	320				
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	U 40		U 48	U 43																U 40	U 505	U 515	U 36	U 43
	CNT	7	4	5	5	2	5	5	4	3	10	23	23	26	28	23	28	25	15	15	13	8	6	7	6

SWEEP 1.0 MC TO 25.0 MC IN 16.2 SECONDS. JANUARY, 1961

TABLE 30

LYCKSELE, SWEDEN (64.6N, 18.8E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 40	U 43	U 39	37	37	38	35	31	35	53	76	93	99	97	86	78	59	48	35	32	32	34	U 37	U 40
	CNT	26	28	29	29	30	29	31	27	30	31	31	30	31	30	31	29	27	24	27	25	25	25	24	27
	UD																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED	350	335	325	320	295	285	270	270	255	240	240	235	230	230	230	225	230	235	250	280	300	300	330	350
	CNT	25	28	29	29	31	30	31	27	30	30	31	30	31	30	31	29	26	27	26	23	27	28	27	26
	UQ																								
	LD																								
M(3000)F2	MED	U 240	U 240	U 240	250	250	260	260	270	260	280	300	300	300	300	300	280	300	290	280	260	260	260	U 260	U 250
	CNT	22	22	27	27	27	28	28	24	28	31	31	30	30	29	31	27	23	23	23	20	23	22	21	21
	UQ																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED									100	150	175	180	190	180	155	115								
	CNT	1	2	2	1		3	3	3	10	20	21	22	19	19	18	14	2		2	1		1		1
h'E	MED									160	120	105				120									
	CNT									5	8	8	4	2	3	6	2								
foEs	MED																								
	CNT																								

SWEEP 0.33 MC TO 20.0 MC IN 3 MINUTES. DECEMBER, 1959

TABLE 31

JULIUSRUH/RUGEN, GERMANY (54.6N, 13.4E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	28	28	27	27	27	28	26	27	50	78	98	110	113	113	118	103	93	80	56	42	35	31	31	28
	CNT	30	29	27	28	28	29	30	29	27	28	28	28	26	31	27	30	29	28	28	29	29	29	29	30
	UQ																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED	E 330	320	320	300	300	E 295	290	300	290	280	270	290	230	230	230	225	220	220	230	230	270	300	310	340
	CNT	31	31	31	31	31	30	29	30	30	30	30	30	29	30	31	30	29	30	30	27	29	31	31	31
	UQ																								
	LD																								
M(3000)F2	MED	250	255	255	255	265	275	280	265	290	320	315	310	310	300	310	310	310	310	310	295	290	275	265	260
	CNT	30	28	27	27	28	29	28	29	26	28	29	28	26	24	28	29	29	24	28	27	28	29	29	30
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED									U 175	200	U 240	U 275				405								
	CNT			1	3	4				8	10	6	5	3	3	1	10	2							
h'E	MED																								
	CNT																								
foEs	MED		15	11	10	14	16	U 17	U 20	G	20	30	29	U	G	U 26	G	U 20	U 21		U 20		U 22		
	CNT	4	10	15	19	18	20	7	7	15	21	15	11	10	6	8	16	14	7	4	4	3	5	4	

SWEEP 0.5 MC TO 20.0 MC IN 20 SECONDS. DECEMBER, 1959

TABLE 32

ST. JOHNS, NEWFOUNDLAND (47.6N, 52.7W) TIME 60.0W

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	38	35	33	32	31	30	49	79	97	110	120	121	120	118	113	100	89	69	58	48	47	40	38
	CNT	27	28	27	26	28	28	30	31	31	31	31	31	31	31	31	29	28	27	26	27	26	24	26	27
	UD	42	40	42	41	38	36	36	52	81	100	119	125	125	130	124	120	106	92	75	69	58	54	49	45
	LD	29	29	30	28	28	26	26	44	70	90	104	115	115	112	111	110	96	72	58	30	32	30	30	30
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED	300	300	300	282	280	281	273	251	228	230	230	230	230	230	230	230	223	223	232	250	260	289	285	290
	CNT	31	31	31	30	31	30	30	31	31	31	31	31	31	31	31	30	28	29	31	31	31	31	31	31
	UQ																								
	LD																								
M(3000)F2	MED	270	270	280	280	225	270	285	310	320	320	315	320	315	310	310	310	315	310	300	295	285	275	280	275
	CNT	24	27	26	25	27	27	25	31	30	31	31	31	31	31	31	28	26	24	23	22	24	21	22	21
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								180	220	270	300	300	300	300	270	220								
	CNT								8	10	12	13	13	11	10	9	6								
h'E	MED								116	122	122	123	122	118	115	120	134								
	CNT								9	11	13	13	13	11	10	9	6								
foEs	MED								U 18	G 22	G 26	G 30													
	CNT	31	31	31	30	31	30	30	31	31	31	31	31	31	31	31	30	29	29	31	31	31	31	31	31

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. DECEMBER, 1959

TABLE 33

GRAZ, AUSTRIA (47.1N, 15.5E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	46	44	42	44	42			45	83	99	112	117	114	114	113	107	92	83	60	54	51	48	45	44
	CNT	12	7	10	9	4			13	10	12	14	19	17	20	21	14	20	20	16	13	5	9	8	5
	UQ	42	41	41	42				42	67	85	104	108	108	107	101	101	87	77	57	49	48	43	42	44
	LQ	49	47	43	47				52	88	110	118	127	126	120	123	115	94	86	67	63	55	52	48	48
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED																								
	CNT																								
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 2.0 MC TO 18.0 MC IN 50 SECONDS. DECEMBER, 1959

TABLE 34

SOTTENS, SWITZERLAND (46.6N, 6.7E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	37	38	38	35	34	34	34	52	75	89	97	106	97	92	91	87	79	73	56	44	41	37	38
	CNT	22	22	18	21	21	18	19	11	18	24	20	18	19	24	25	23	21	19	17	18	17	15	18	17
	UQ																								
	LQ																								
h'F2	MED	300	320	325	300	280	270	250	260	230	210	215	220	220	220	220	220	220	200	210	220	230	260	300	320
	CNT	22	22	18	21	21	18	19	11	18	24	20	18	19	24	25	23	21	19	17	18	17	15	18	17
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	300	300	290	300	310	320	330	330	340	350	370	350	360	360	360	370	370	370	350	350	340	330	300	300
	CNT	22	22	18	21	21	18	19	10	18	23	19	15	16	24	24	22	19	18	16	16	17	15	18	17
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED									220	250	270	290	310	305	290	270	240							
	CNT									3	12	15	16	11	13	9	9	6							
h'E	MED									120	110	100	110	100	105	100	110	125							
	CNT									3	12	15	16	11	10	9	9	6							
foEs	MED																								
	CNT																								

SWEEP 1.0 MC TO 25.0 MC IN 30 SECONDS. DECEMBER, 1959

TABLE 35

DELHI, INDIA (28.6N, 77.2E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	39	32	31	32	31	30	38	84	111	124	132	132	133	134	135	141	140	125	113	92	85	64	50	46
	CNT	17	13	8	8	17	17	19	16	26	24	23	22	23	24	21	25	24	24	23	24	17	14	11	13
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED							U 300			U 345	U 325													
	CNT	1				2	1	5	1	1	5	7	4	4	3	2	1		1		1				
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED									280	280				U 310		280		U 300						
	CNT									7	5	1	1	1	4	1	5	1	3	2					
h'E	MED									100	100				U 90		80								
	CNT									7	5	1	1	1	4	1	5		2	2					
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL DECEMBER, 1959

TABLE 36

AHMEDABAD, INDIA (23.0N, 72.6E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	84	80	74	64	40	33	40	80	123	135	137	140	150	152	155	155	U 166	U 162	153	152	150	149	120	93
	CNT	31	31	29	30	28	27	31	30	22	30	29	28	27	22	25	22	23	28	30	24	21	31	30	30
	UQ																								
	LQ																								
h'F2	MED										240	250	290	300	300	300	300	270	250						
	CNT										30	29	28	28	25	27	27	20	30						
	UQ																								
	LQ																								
h'F	MED	260	265	240	225	225	220	270	250	250	235	225	215	225	230	235	230	250	250	225	230	230	215	215	230
	CNT	31	31	29	30	28	27	31	30	4	13	24	28	21	14	14	16	15	28	30	29	28	31	30	30
	UQ																								
	LQ																								
M(3000)F2	MED	265	275	305	330	300	275	280	305	320	320	305	280	275	270	270	270	275	295	300	290	300	305	300	270
	CNT	31	31	29	30	28	27	30	30	28	30	29	28	27	25	26	25	27	20	30	30	28	31	30	29
	UQ																								
	LQ																								
foF1	MED										450	480	480	520	520	480	490	510							
	CNT										11	17	24	15	10	11	12	6							
foE	MED								160	250	310	340	360	370	370	350	330	270	190						
	CNT								27	27	26	28	25	25	24	24	24	21	14						
h'E	MED								130	110	110	110	110	110	110	110	110	115	130						
	CNT								9	23	23	24	24	21	21	23	18	16	7						
foEs	MED	20	20	20	20	20	21	20	20	U 29	U 29	U 28	U 28	U 30	U 29	U 28	U 26	32	30	30	43	43	19	40	40
	CNT	31	31	29	30	28	28	31	30	29	29	28	28	30	29	28	26	28	30	30	29	28	31	30	30

SWEEP 0.6 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC DECEMBER, 1959

TABLE 38

BOMBAY, INDIA (19.0N, 72.8E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	107	93	80	70	54	42	40	77		142	149	157	156		165	D 164	D 164	D 164	D 163	D 159		D 156	D 145	D 123
	CNT	19	17	16	16	17	17	23	24		19	21	14	25		19	23	20	27	29	27		20	15	17
	UQ																								
	LQ																								
h' F2	MED																								
	CNT																								
	UQ																								
	LD																								
h' F	MED																								
	CNT																								
	UD																								
	LQ																								
M(3000)F2	MED	265	260	270	280	280	285	280	280		285	270	250	250		245	U 245	U 245	250	U 235	U 250				U 260
	CNT	12	17	15	16	16	17	19	24		40	19	13	12		11	9	7	10	9	6		4	4	8
	UQ																								
	LQ																								
fo F1	MED																								
	CNT																								
fo E	MED								U 310																
	CNT								1 4		400 14	460 14	390 8	410 6	400 5	430 10	420 11	400 8	390 8	370 5	1				
h' E	MED								U 120																
	CNT								1 4		120 14	120 14	120 8	120 7	120 5	140 10	120 11	140 8	120 8	120 5	1				
fo Es	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL

DECEMBER, 1959

TABLE 37

CALCUTTA, INDIA (23.0N, 88.6E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	D 90	D 70	D 60	D 50	D 40	45	D 53	100	D	D	D	D	D	D	D	D	D	D	D	U	D	D	D	D 110
	CNT	26	26	29	25	24	19	23	23	27	27	25	26	25	26	26	22	23	27	28	28	28	27	24	25
	UQ																								
	LQ																								
h' F2	MED															330									
	CNT															6									
	UQ																								
	LD																								
h' F	MED	250	250	250	250	250	260	250	250	250	250	250	250	250	250	250	250	250	250	250	240	240	225	230	240
	CNT	28	28	29	28	28	27	26	26	27	27	25	26	24	26	25	20	23	27	28	28	28	27	26	27
	UD																								
	LQ																								
M(3000)F2	MED		U 380	U 400	U 390	380	380	370	U 390	U 380															U 380
	CNT	4	6	10	9	13	15	16	19	7	3	2													6
	UQ																								
	LQ																								
fo F1	MED										U 800	U 850	U 850	U 850	U 750	U 680	U 580	U 850	U 850						
	CNT										3	3	6	11	11	12	3	6	4						
fo E	MED								280	320	370	U 400	D 400	D 400	D 400	U 380	360	320	300						
	CNT								12	22	22	17	14	13	11	10	11	14	14						
h' E	MED								100	100	100	100	100	100	100	100	100	100	100	1					
	CNT							1	16	26	21	16	12	11	11	10	11	17	21						
fo Es	MED	E	E	E	E	E	E	E			24									24	16	E	E	E	E
	CNT	28	29	29	28	27	25	25	26	25	22	18	15	14	12	12	10	17	25	24	28	27	27	27	27

SWEEP 1.0 MC TO 13.0 MC IN 1 MINUTE 55 SECONDS.

DECEMBER, 1959

TABLE 39

MADRAS, INDIA (13.1N, 80.3E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
foF2	MED	114	104	94	84	72	56	76	110	128	133	131	127	122	125	127	127	128	128	126	122	118	120	116	115	
	CNT	23	21	22	24	24	24	28	24	30	31	25	21	27	19	18	23	21	27	29	26	25	25	22	25	
	UD																									
	LQ																									
h' F2	MED																									
	CNT																									
	UQ																									
	LD																									
h' F	MED																									
	CNT																									
	UQ																									
	LD																									
M(3000)F2	MED						U 310	305	295	290	260	245	245	240	240	235	235									
	CNT	2	1	1	3	3	5	13	18	26	20	14	17	23	14	14	11	4					3	2	3	
	UQ																									
	LQ																									
fo F1	MED																									
	CNT																									
fo E	MED																									
	CNT																									
h' E	MED																									
	CNT																									
fo Es	MED																				U					
	CNT				1	1		2	40 8	42 15	43 23	44 20	44 13	45 15	46 13	48 12	54 12	64 12	49 11	44 10	44 12	37 4	1	U 44 3	U 46 4	4

SWEEP 2.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL

DECEMBER, 1959

TABLE 40

TIRUCHY, INDIA (10.8N, 78.7E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
fo F2	MED	D 96	U 95	U 90	U 84	68	52	70	102	117	123	116	117	118	118	119	120	D 117		D 105	D 102	D 100	U 102	U 102	100
	CNT	14	8	9	12	15	22	19	23	48	40	26	27	27	26	27	30	23		31	28	12	13	11	15
	UQ																								
	LQ																								
h' F2	MED																								
	CNT																								
	UQ																								
	LD																								
h' F	MED																								
	CNT																								
	UQ																								
	LD																								
M(3000)F2	MED					355	355	335	315	275	265	255	240	240	240	240	235	U 240							
	CNT			3	3	11	13	11	13	17	15	20	23	25	20	19	15	9		3	4	2		2	4
	UQ																								
	LQ																								
fo F1	MED																								
	CNT																								
fo E	MED																								
	CNT																								
h' E	MED																								
	CNT																								
fo Es	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL

DECEMBER, 1959

TABLE 41

KODAIKANAL, INDIA (10.2N, 77.5E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	94	92	88	76	66	55	60	96	114	118	117	114	116	115	118	118	116	116	109	98	94	92	90	92
	CNT	18	18	19	23	22	24	27	29	30	30	27	27	28	28	28	30	30	30	30	30	23	20	18	18
	UQ			.																					
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED	260	250	240	230	230	220	265	245	230	220	210	210	210	200	215	230	240	265	310	360	350	310	275	270
	CNT	29	28	29	28	30	30	30	30	30	30	28	27	28	26	27	28	28	31	31	29	29	29	27	28
	UQ																								
	LQ																								
M(3000)F2	MED	280	285	300	310	315	330	290	290	270	250	240	235	230	230	225	225	230	230	225	220	220	240	250	260
	CNT	18	18	19	23	22	24	27	29	30	30	27	27	28	28	28	30	30	30	30	30	23	20	18	18
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MED								260																
	CNT								13	3	2				1	2	3	1	2						
h'E	MEQ								110	110	U 110					U 105	U 110	110	120						
	CNT								23	6	3			2	2	3	3	8	8						
foEs	MEQ	67	40	41	40				69	100	116	124	122	122	122	120	110	92	70				36	60	45
	CNT	10	11	12	5	1	1		30	29	30	27	27	28	26	27	30	30	21	2		2	7	13	14

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. DECEMBER, 1959

TABLE 42

TRIVANDRUM, INDIA (8.5N, 77.0E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 113	U 94	U 78	76	66	46	59	95	113	115	114	113	119	116	118	118	116	115	D 107	U 94	U 99	92	U 108	U 104
	CNT	9	9	9	12	14	17	23	29	30	15	13	19	21	20	16	24	22	11	12	9	8	12	9	8
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MEQ																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MEQ	U 285	U 300	U 310	U 310	310	325	310	295	280	260	250	240	240	235	230	225	235	U 235	U 230			U 260	U 270	
	CNT	6	8	8	9	10	15	20	23	26	15	12	19	21	20	16	23	15	8	5	4	4	9	7	4
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL DECEMBER, 1959

TABLE 43

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	40	40	44	40	41	39	56	60	66	64	65	59	59	62	62	60	61	61	63	63	57	56	45	45
	CNT	16	15	13	10	8	7	5	11	10	8	13	17	20	19	19	23	21	17	21	24	15	16	12	16
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	265	275	285	290	280	282	295	265	278	253	240	250	245	245	250	250	245	250	250	262	260	250	255	265
	CNT	16	14	13	4	5	4	4	11	10	10	15	17	15	17	19	22	24	17	21	24	14	16	11	15
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	22	35	32	33	29	U	U	U	40	U	U	U	U	40	33	42	36	U	U	U	U	U	U	U
	CNT	25	30	30	27	28	25	26	30	31	29	29	28	31	30	30	30	30	28	31	29	28	30	26	28

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. DECEMBER, 1959

TABLE 44

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	44	44	46	46		U	U																	
	CNT	18	16	16	14	9	7	4	9	10	11	14	12	16	21	23	18	19	22	19	19	17	18	17	15
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MEQ																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MEQ	240	220	240	220	225	230	235	230	240	230	220	220	230	230	225	230	230	225	225	225	230	220	230	230
	CNT	18	16	16	14	9	7	4	9	9	11	14	12	16	21	23	18	19	22	19	19	17	18	17	14
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
	CNT	24	23	17	18	17	18	9	14	14	17	19	20	21	23	23	21	26	24	23	22	22	24	23	19

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. DECEMBER, 1959

TABLE 45

DELHI, INDIA (28.0N, 77.2E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 145	D 142			D 134	D 135	D 136	D 135	D 128	D 133	D 136	U 140	D 142	D 146	D 147	D 145	D 145	U 140	U 128	U 108	U 102	D 82	D 60	D 46
	CNT	11	11			14	13	15	17	24	21	22	17	21	24	17	24	29	20	25	23	11	14	11	12
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED									U 305		U 335	U 345												
	CNT						1	4		8	3	8	5		3	1	2		1		1				
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED									270	U 330						U 300								
	CNT									5	4	1	1		1		4	1							
h'E	MED									100	U 100						U 100								
	CNT									5	4	1	1		1		4	1							
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL NOVEMBER, 1959

TABLE 46

AHMEDABAD, INDIA (23.0N, 72.6E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	85	84	73	64	52	38	46	104	132	140	150	151	156	U 160	U 168	170	174	171	172	167	164	154	133	108
	CNT	21	20	16	17	16	16	16	15	16	19	20	19	24	17	15	15	17	24	20	18	13	19	21	20
	UQ																								
	LQ																								
h'F2	MED										450	250	300	310	325	320	300	300							
	CNT									4	19	20	19	24	22	25	25	25	1						
	UQ																								
	LQ																								
h'F	MED	255	260	250	240	230	240	260	250	240	230	225	220	225	230	230	250	250	250	240	235	230	215	220	245
	CNT	21	21	19	18	17	16	16	15	16	17	19	17	22	17	13	7	19	24	25	23	21	22	23	20
	UQ																								
	LQ																								
M(3000)F2	MED	275	295	300	305	305	300	260	305	310	305	295	275	270	265	260	275	270	275	285	290	295	300	280	275
	CNT	21	19	17	17	16	16	16	15	16	19	20	19	24	21	23	25	24	22	24	24	18	21	20	20
	UQ																								
	LQ																								
foF1	MED										500	500	500	480	470	480		500							
	CNT										6	11	9	14	8	8	2	3	1						
	UQ																								
	LQ																								
foE	MED							E	200	270	220	350	360	370	370	380	330	280	200						
	CNT							3	13	14	20	19	17	22	20	22	23	22	15						
h'E	MED								125	110	110	110	110	110	110	110	110	115	130						
	CNT							1	12	14	20	18	13	21	17	23	22	21	10						
foEs	MED	23	21	23	24	20	22	20	G	G	G	G	G	G	G	G	G	G							
	CNT	21	21	19	18	17	16	16	14	15	20	21	20	24	22	24	23	26	24	25	23	21	22	23	20

SWEEP 0.6 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC NOVEMBER, 1959

TABLE 47

CALCUTTA, INDIA (23.0N, 88.6E) TIME 90.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	110	D 92	D 75	D 60	D 50	D 42	D 68	D 112	D 23	D 21	D 22	D 21	D 16	D 15	D 16	D 18	D 20	D 24	D 25	D 24	D 24	D 24	D 24	D 115
	CNT	26	24	24	26	23	22	22	24																24
	UQ																								
	LQ																								
h'F2	MED										U 300	U 350		U 350	U 380	U 400									
	CNT									1	9	10		11	9	7	2	3							
	UQ																								
	LQ																								
h'F	MED	250	250	250	240	245	250	255	250	250	250	250	250	250	250	250	250	250	255	250	250	235	230	225	235
	CNT	25	24	23	24	21	21	20	22	21	21	22	21	16	15	16	17	21	24	25	24	24	24	24	24
	UQ																								
	LQ																								
M(3000)F2	MED	U 380		U 370	U 360	U 380	U 370	U 370	U 390																
	CNT	6	3	9	5	16	15	13	15	2	1														3
	UQ																								
	LQ																								
foF1	MED											U 950	U 950	U 900	U 920	U 900									
	CNT											9	11	10	10	6	2		1						
foE	MED								260	340	380	400	D 400	D 400	D 400	D 400	330	340	300						
	CNT								20	13	10	9	9	8	9	10	11	12	16						
h'E	MED								100	100	100	100	100	100	100	100	100	100	100		1				
	CNT								21	19	16	12	11	9	9	11	14	17	22						
foEs	MED	E	E	E	E	E	E	E												21	E	E	E	E	E
	CNT	25	24	22	24	21	20	20	22	18	16	14	11	9	9	12	15	18	23	24	24	24	24	24	24

SWEEP 1.0 MC TO 13.0 MC IN 1 MINUTE 55 SECONDS. NOVEMBER, 1959

TABLE 48

BOMBAY, INDIA (19.0N, 72.8E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 127	109	93	80	59	43	55	104		151	157	165	169		D 163	D 164	D 164	D 168	D 172	D 165		D 157	D 147	D 135
	CNT	21	19	21	23	25	27	27	26		21	22	19	16	3	27	27	26	30	30	28	2	15	14	21
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	U 265	270	280	280	285	285	270	290		280	270	255	240		235	235	U 235	245	260					U 260
	CNT	8	15	19	19	24	26	27	26		20	19	19	15	1	12	12	7	13	10	2		2	2	6
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								320		420	420	400	430		430	400	390	340	U 380					
	CNT							1	9		6	11	7	7		9	8	12	7	4					
h'E	MED								100		160	140	160	160		120	120	120	120	U 120					
	CNT							1	9		6	11	8	7		9	8	12	7	4					
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL NOVEMBER, 1959

TABLE 49

MADRAS, INDIA (13.1N, 80.3E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	125	120	105	88	73	66	88	120	134	138	132	126	126	128	130	135	135	135	128	122	128	130	137	132
	CNT	26	25	21	18	26	26	30	29	30	30	30	26	28	18	26	29	24	26	28	30	24	26	24	28
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MEQ																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED						U 320	315	310	280	260	245	235	230	230	235	235	U 245							
	CNT					L	5	17	28	26	18	19	17	24	10	20	11	9	L						
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MEQ																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MEQ																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL NOVEMBER, 1959

TABLE 50

TIRUCHY, INDIA (10.8N, 78.7E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	D 114	D 106	D 90	D 72	60	54	84	116	132	128	122	120	119	120	126	128	130		D 113	D 105	U 106	D 104	U 112	U 112
	CNT	14	15	11	15	15	23	25	24	18	22	28	26	28	23	24	24	16		26	17	7	10	11	14
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED				U 430	340	345	330	300	270	260	255	250	245	240	240	235	240							
	CNT	1	2	2	6	12	18	17	14	12	16	20	20	25	18	18	15	10			1		1		
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MEQ																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL NOVEMBER, 1959

TABLE 51

KODAIKANAL, INDIA (10.2N, 77.5E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	115	101	94	77	64	55	74	107	123	127	120	116	117	118	123	124	123	125	116	103	102	111	116	118
	CNT	17	26	26	27	28	28	29	30	30	29	26	27	28	26	27	28	29	28	29	26	18	17	19	18
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT									1															
	UQ																								
	LQ																								
h'F	MEQ	240	240	220	235	220	220	200	240	220	220	205	200	205	210	215	220	240	270	340	380	355	300	260	240
	CNT	29	30	30	29	30	30	30	30	29	29	26	26	28	26	27	28	28	28	29	25	21	25	27	29
	UQ																								
	LQ																								
M(3000)F2	MED	300	305	315	310	320	330	305	295	265	250	235	235	230	230	230	230	230	235	220	210	225	240	265	280
	CNT	17	25	26	27	28	28	29	30	30	29	26	27	28	26	27	28	29	28	29	26	18	17	19	18
	UQ																								
	LQ																								
foF1	MED									1															
	CNT																								
foE	MEQ								280									290							
	CNT							1	12	2			1	1	1	2		5							
h'E	MEQ								110	110						U 110	110	110							
	CNT							1	21	5	2		1	1	1	4	7	16	L						
foEs	MED		U 54	40		U 60		U 24	76	100	116	126	128	124	126	120	103	92	U 60					U 62	
	CNT	8	4	7	1	3	1	3	29	29	29	27	27	28	26	27	28	29	13		1	2	1	12	10

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS, NOVEMBER, 1959

TABLE 52

TRIVANDRUM, INDIA (8.5N, 77.0E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
foF2	MED	D 100	U 106	D 92	81	68	55	76	106	121	124	121	118	117	119	125	128	128	U 120	U 120	D 106	U 106	U 93	L 100	114		
	CNT	15	9	15	12	20	23	26	28	27	17	15	24	24	26	17	16	20	11	8	11	9	17	15	11		
	UQ																										
	LQ																										
h'F2	MEQ																										
	CNT																										
	UQ																										
	LQ																										
h'F	MED																										
	CNT																										
	UQ																										
	LQ																										
M(3000)F2	MED	U 310	U 320	U 320	U 315	310	340	315	290	270	240	235	235	235	235	235	235	235						U 265	U 285		
	CNT	5	7	7	8	16	20	23	25	25	16	15	23	23	23	16	13	13	4	L				2	4	7	6
	UQ																										
	LQ																										
foF1	MED																										
	CNT																										
foE	MED																										
	CNT																										
h'E	MEQ																										
	CNT																										
foEs	MED																										
	CNT																										

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL NOVEMBER, 1959

TABLE 53

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	38	38	38	42	43	50	54	62	68	77	60	70	64	60	62	62	65	64	63	64	60	52	52	46
	CNT	10	16	13	12	9	8	11	12	13	9	8	11	18	14	18	18	22	25	19	18	13	16	15	14
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	270	265	275	280	285	265	270	260	265	265	260	265	250	250	240	260	255	255	255	255	250	270	265	270
	CNT	10	15	12	10	9	7	10	11	12	8	8	10	17	16	17	18	22	25	19	17	12	16	15	14
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	24	39	37	43	42	S	G	G	G	42	G	G	G		44	45	44	S	G	G	G	G	G	G
	CNT	29	29	29	26	29	26	25	26	28	25	29	28	29	30	26	30	29	29	28	29	29	29	29	27

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. NOVEMBER, 1959

TABLE 54

CUTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	40	41	37	44	45	49	56	51	52	60	60	52	58	60	61	61	60	60	61	60	56	51	50	41
	CNT	22	17	21	16	17	14	13	12	18	18	17	20	20	18	21	22	21	24	22	24	23	21	21	20
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	238	240	245	235	252	235	230	245	232	230	240	238	230	228	230	232	230	230	232	230	235	230	230	225
	CNT	18	22	21	17	16	14	12	13	18	18	17	20	20	18	21	22	21	24	22	24	23	21	21	20
	UQ						*																		
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
	CNT	23	21	23	19	19	17	17	17	17	17	19	20	21	21	24	23	22	23	25	23	24	22	21	21

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. NOVEMBER, 1959

TABLE [illegible]

DELHI, INDIA (28.6N, 77.2E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D	D			D	D	D	D	D	D	D	D	D	U	D	D	D	D	D	D	U	D	D	D
	CNT	64	57			42	44	41	94	117	126	135	144	145	147	148	147	145	140	138	130	114	92	75	68
	UQ	12	11			12	12	10	10	22	21	19	20	22	25	17	20	21	22	19	21	12	10	10	11
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED																								
	CNT					1		3		4	7	4	3	1											
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES. MANUAL OCTOBER, 1959

TABLE 56

AHMEDABAD, INDIA (23.0N, 72.6E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	120	110	104	85	58	54	61	104	124	131	144	150	152	D 153	D 160	U 171	U 170	D 168	U 170	U 170	U 156	D 153	148	124
	CNT	20	21	22	18	20	19	21	20	18	23	24	26	14	21	23	12	22	25	13	14	14	22	19	19
	UQ																								
	LQ																								
h'F2	MED									240	250	300	300	350	350	350	300	300	455						
	CNT									19	22	24	25	23	21	25	22	22	24						
	UQ																								
	LQ																								
h'F	MED	260	260	245	225	225	235	265	250	240	230	230	225	225	230	250	U 250	250	250	250	255	230	230	240	250
	CNT	22	23	24	21	21	22	21	21	19	18	18	18	15	13	10	3	6	15	23	23	24	24	20	22
	UQ																								
	LQ																								
M(3000)F2	MED	275	285	300	310	305	270	245	310	305	295	280	275	255	260	260	270	275	280	285	275	280	280	295	280
	CNT	21	23	24	19	19	19	20	21	18	23	24	25	22	14	23	19	21	24	23	23	18	20	17	18
	UQ																								
	LQ																								
foF1	MED										540	520	530	500	490	580		U 580							
	CNT									1	4	9	16	12	8	7	2	3	1						
foE	MED							E	220	280	340	370	390	390	380	370	340	300	220	U 120					
	CNT							4	15	13	13	10	12	13	12	15	17	18	13	4					
h'E	MED							1	115	110	110	110	110	110	110	110	110	115	125	1					
	CNT								10	11	12	9	9	11	14	14	18	20	13						
foEs	MED	18	23	20	20	18	17	21	29	30	33	36	G	G	G	G	G	G				16	19	24	18
	CNT	22	23	25	20	21	23	20	19	19	20	21	22	19	17	18	21	21	31	24	24	25	23	18	22

SWEEP 0.6 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC OCTOBER, 1959

TABLE 57

CALCUTTA, INDIA 12.3°ON, 88.6°E TIME 90.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D	U	U	U	U	U	U	U	U	U	D	D	D	D		U	D	D	L	U	D	U	D	D
	CNT	7	120	100	68	52	50	60	114	7	7	6	6	6	5	4	5	5	6	6	6	6	5	6	6
	UQ		7	7	7	6	7	7	7																
	LQ																								
h'F2	MED												2	2	2	2	2	1							
	CNT																								
	UQ																								
	LQ																								
h'F	MED	300	250	250	250	250	250	280	250	240	240	250	250	250	240	250	250	250	260	250	265	240	240	225	245
	CNT	7	7	7	7	6	6	6	6	6	6	5	5	6	6	5	5	5	6	6	6	5	5	6	6
	UQ																								
	LQ																								
M(3000)F2	MED																								
	CNT	1	1	4	9	3	4	4	5	1	1														
	UQ																								
	LQ																								
foF1	MED																								
	CNT												2	2	2	2	2	1							
foE	MED																								
	CNT								1																
h'E	MED																								
	CNT								1																
foEs	MED	E																				E			
	CNT	7	7	7	7	5	6	6	6	6	6	4	4	5	5	5	5	5	6	6	6	6	5	6	6

SWEEP 1.0 MC TO 13.0 MC IN 1 MINUTE 55 SECONDS. OCTOBER, 1959

TABLE 58

BOMBAY, INDIA 19.0°ON, 72.8°E TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D	U																						
	CNT	135	127	99	93	74	64	73	106		141	155	160	168		173	174	170	171	U 165	D 154		D 150	U 146	D 140
	UQ	11	8	11	15	19	26	29	28		23	25	21	24	C	27	24	23	27	31	28	1	10	8	10
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED		U	U	U																				
	CNT	2	280	270	280	282	285	280	300		265	260	245	230		230	230	240	245	240	240				
	UQ		6	8	4	12	13	18	24		21	25	20	21		19	16	21	23	14	10		3	3	
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								U																
	CNT								380		420	420	400	400		380	370	400	390	U 280					
	UQ								3		9	8	9	12	1	10	13	8	5	3					
	LQ																								
h'E	MED																								
	CNT								120		120	120	120	120		120	120	120	120	U 120					
	UQ								3		9	8	9	12	1	10	13	8	5	4					
	LQ																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL OCTOBER, 1959

TABLE 59

MADRAS, INDIA 13.1°N, 80.3°E TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	126	114	102	86	72	70	72	123	136	138	140	129	124	128	136	137	138	136	126	120	130	134	136	133
	CNT	24	21	13	20	24	12	30	3	24	30	28	30	30	30	28	24	30	29	28	26	21	27	24	28
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED																								
	CNT				1			5	20	275	252	240	240	225	240	240	240	3	2	1					
	UQ							11	14	22	20	13	21	24	1	14	14								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL OCTOBER, 1959

TABLE 60

TIRUCHY, INDIA 10.8°N, 78.7°E TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D	U	U	U				U											U	D		U	U	U
	CNT	111	101	105	88	78	59	84	117	130	134	122	121	122	125	130	134	134		114	110		114	114	110
	UQ	10	6	6	10	14	21	17	21	22	19	26	23	25	25	30	24	14		24	13	4	7	8	9
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED																								
	CNT				1	155	122	144	142	142	152	145	142	140	140	140	140	145							
	UQ					4	11	7	7	12	11	21	20	24	21	24	16	7							
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL OCTOBER, 1959

TABLE 63

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	37	35	36	31	35	46	60	67	80	77	64	66	66	60	68	73	70	67	70	70	63	53	42	36
	CNT	12	16	12	10	9	6	7	14	13	12	11	15	12	13	19	19	21	23	17	20	20	10	17	15
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LD																								
M(3000)F2	MED	280	280	280	280	280	285	275	280	278	280	260	250	270	255	265	260	260	260	265	255	265	265	250	250
	CNT	12	16	12	16	9	6	7	13	12	10	11	14	12	13	19	19	22	23	17	19	20	10	17	15
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	26	36	38	36	46	44	35	30	34	G	G	G	32	35	G		29	G	G	G	G	G	G	E
	CNT	28	30	30	30	30	26	29	28	27	29	28	30	30	30	29	31	31	29	30	30	30	29	30	29

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. OCTOBER, 1959

TABLE 64

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	40	41	41	45	38	56	64	60	66	66	64	60	70	66	72	70	71	74	66	60	57	50	44	42
	CNT	22	19	17	24	15	16	16	17	18	23	22	21	26	28	28	26	27	26	27	26	21	21	24	23
	UQ																								
	LO																								
h'F2	MED																								
	CNT																								
	UD																								
	LO																								
h'F	MED																								
	CNT																								
	UQ																								
	LO																								
M(3000)F2	MED	232	245	245	250	250	248	265	255	255	265	245	240	240	245	240	240	240	245	240	232	235	240	232	235
	CNT	22	19	17	23	15	16	16	17	18	23	21	20	25	23	27	25	26	25	27	26	21	21	24	23
	UD																								
	LO																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	E	E
	CNT	14	17	26	26	26	23	25	25	24	25	28	27	30	30	30	29	28	31	31	30	29	26	26	25

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. OCTOBER, 1959

TABLE 65

JULIUSRUH/RUGEN, GERMANY (54.6N, 13.4E) TIME 15.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	53	51	49	46	43	41	47	57	63	70	72	77	81	82	85	84	84	84	88	84	80	69	59	55
	CNT	27	27	21	24	23	29	30	28	29	28	30	29	30	30	30	30	30	30	28	30	28	28	29	30
	UQ																								
	LQ																								
h'F2	MED									U	U		U												
	CNT					1	2	2	4	500	500	400	400	4	4	2	2								
	UQ									5	5	12	8												
	LQ																								
h'F	MED	330	310	320	320	310	310	290	270	250	240	230	230	230	235	240	240	250	260	260	250	260	260	280	300
	CNT	30	29	29	29	27	30	30	27	29	28	28	29	30	29	30	30	30	29	29	30	29	30	27	27
	UQ																								
	LQ																								
M(3000)F2	MED	250	245	240	245	245	260	285	290	290	290	275	275	275	280	280	280	280	285	285	285	285	270	260	245
	CNT	26	23	19	21	17	28	30	27	28	26	29	29	30	30	30	30	30	30	29	29	28	29	27	29
	UQ																								
	LQ																								
foF1	MED										U	U													
	CNT					1	2	2	4	4	470	500	4	3	2										
	UQ										5	9													
	LQ																								
foE	MED												U												
	CNT			1	2	1	4	20	23	24	15	12	5	11	10	17	19	20	23	15	2				
	UQ																								
	LQ																								
h'E	MED																								
	CNT																								
foEs	MED	U							G	G	G	G	G	G	G	G	G	G	G			U	U	U	U
	CNT	18	15	13	13	13	19	18	25	23	20	19	13	17	18	17	19	20	25	21	20	35	22	21	21
	UQ	9	17	24	23	17		27												24	14	7	9	6	7
	LQ																								

SWEEP 0.5 MC TO 20.0 MC IN 20 SECONDS. SEPTEMBER, 1959

TABLE 66

DELHI, INDIA (28.6N, 77.2E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D	D			D	D	D	D				D	D	D	D	D	D	D	D	D	D	D	D	D
	CNT	80	72			61	62	80	101	117	119	131	138	144	149	146	148	143	140	131	118	102	96	90	87
	UQ	24	23	1	1	20	18	18	14	17	15	17	18	20	22	19	19	16	21	17	18	22	20	22	21
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED										U		U												
	CNT								1	335	285	295	280	3	1					1					
	UQ									12	7	12	6												
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT								1	2					1	1	1								
h'E	MED																								
	CNT								1	2					1	1	1								
foEs	MED																								
	CNT																								

SWEEP 0.75 MC TO 20.0 MC IN 5 MINUTES. MANUAL SEPTEMBER, 1959

TABLE 67

FORMOSA, CHINA (25.0N, 121.5E) TIME 120.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	142	141	136	107	78	64	95	110	117	125	136	145	159	163	170	171	175	168	170	D 164	D 163	D 165	157	154
	CNT	13	18	16	19	22	24	28	28	27	25	29	29	28	29	27	27	23	26	28	24	22	21	17	13
	UQ	155	150	140	117	90	86	101	118	130	138	142	154	168	174	174	180	183	180	175	175	174	179	170	168
	LQ	111	114	112	81	68	54	88	101	105	112	127	140	150	158	164	162	166	156	158	155	150	149	142	126
h'F2	MED												390	U	380		U	380	360	U	340				
	CNT												1	3	9		11	10		5					
	UQ																								
	LQ																								
h'F	MED	260	260	240	220	220	240	250	240	230	240	240	E 240	E 240	E 240	E 240	E 240	240	260	260	260	260	260	270	270
	CNT	28	28	28	28	26	27	28	28	25	23	23	24	16	15	15	21	21	26	29	28	30	30	29	30
	UQ																								
	LQ																								
M(3000)F2	MED	285	290	300	290	290	270	305	315	295	275	260	270	265	260	265	270	275	280	280	275	270	270	280	285
	CNT	13	17	12	17	21	24	26	27	25	25	29	29	27	29	25	24	23	22	25	19	19	19	13	10
	UQ	295	305	315	320	310	290	315	325	310	280	270	275	275	265	270	280	285	290	295	285	280	275	290	290
	LQ	280	265	280	285	280	260	290	300	290	265	255	260	255	255	255	260	265	275	270	265	265	260	270	275
foF1	MED												U	U	U	U	U	U							
	CNT												760	740	720	695	735								
	UQ												1	1	4	4	2								
	LQ																								
foE	MED								J	U								U							
	CNT								300	360								340							
	UQ								1	1								6							
	LQ																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	E					E		E	E	E	E			E		E	E	E	E
	CNT	22	17	17	17	17	17		39	45	52	54	54	52	52	50	45	41	42	31	29	24	25	24	24
	UQ	15	20	21	22	26	27	15	28	25	24	29	28	22	23	23	26	24	24	29	29	22	23	20	24
	LQ																								

SWEEP 1.1 MC TO 19.5 MC IN 15 MINUTES, MANUAL SEPTEMBER, 1959

TABLE 68

AHMEDABAD, INDIA (23.0N, 72.6E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
foF2	MED	102	98	84	72	63	60	82	109	110	121	130	146	D 150	D 153	D 153	D 153	D 153	D 153	D 150	U 144	137	136	123	110	
	CNT	23	17	22	18	20	21	19	18	19	16	18	14	21	21	22	21	21	20	24	20	19	18	20	21	
	UQ																									
	LQ																									
h'F2	MED									240	250	350	350	350	350	350	350	340	300							
	CNT									10	15	14	17	16	40	18	22	21	19	1						
	UQ																									
	LQ																									
h'F	MED	300	275	270	270	260	300	270	245	240	225	210	225	210	230	235	250	250	250	260	270	260	260	295	300	
	CNT	24	22	23	22	20	21	22	19	19	11	10	11	9	9	6	8	10	7	23	24	23	24	24	24	
	UQ																									
	LQ																									
M(3000)F2	MED	270	275	275	280	285	265	300	320	305	270	250	250	U 255	U 250	U 255	U 260	U 275	U 275	275	275	265	265	265	265	
	CNT	22	19	23	22	20	21	22	19	19	16	15	14	12	14	17	14	15	16	21	22	20	17	18	19	
	UQ																									
	LQ																									
foF1	MED										470	500	550	580	590		520	540								
	CNT									2	3	5	9	9	7	2	4	5	2							
	UQ																									
	LQ																									
foE	MED							E	240	310					U 420	400		310	280	E						
	CNT							15	8	5	2		1		2	3	6	7	14	16						
	UQ																									
	LQ																									
h'E	MED								110	110	U 110				U 110		110	110	110							
	CNT							1	8	5	3	2	1	2	3	1	10	12	13	2						
	UQ																									
	LQ																									
foEs	MED	E	E	E	E	E	E		14	30	38	43	43	44	43		43		25	36	34	24	19	13	20	19
	CNT	24	22	23	21	20	20	22	19	19	12	15	14	11	13	10	20	19	18	23	23	21	23	23	22	
	UQ																									
	LQ																									

SWEEP 0.6 MC TO 25.0 MC IN 5 MINUTES. AUTOMATIC SEPTEMBER, 1959

TABLE 69

CALCUTTA, INDIA (23.0N, 88.6E) TIME 90.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	U 95	U 95	U 68	U 60	U 52		U 70	U 109	D			D	D				D	D	D	U	U			
	CNT	5	5	6	6	6	4	5	5	5	4	4	5	5	4	3	4	5	5	6	6	6	4	4	4
	UQ																								
	LQ																								
h'F2	MED											2	2	3	2	2	1	1							
	CNT																								
	UQ																								
	LQ																								
h'F	MEQ	285	270	290	250	265	250	300	250	U 250	U 250	U 275	U 255	U 260			U 250	U 250	U 250	U 260	275	260	250	280	300
	CNT	6	6	5	6	6	5	5	5	4	4	4	4	3	2	2	3	3	3	4	6	5	5	5	5
	UQ																								
	LQ																								
M(3000)F2	MED			2	2	2	2		2																
	CNT																								
	UQ																								
	LQ																								
foF1	MEQ											2	3	2		1		1							
	CNT																								
foE	MED									U 350									U 330						
	CNT								2	3	2	2	2	2	1		1	2	3						
h'E	MED								100	U 100	U 100			U 100			U 100	U 100	U 100						
	CNT								5	4	2	2	2	3	2	2	3	4	4						
foEs	MEQ	E	E		E	E	E	U									U	U	U	U	U		E		E
	CNT	5	5	16 6	6	5	5	16 4	4	4	3	2	2	1	2	3	50 3	40 3	32 4	21 4	22 4	21 5	5	22 5	5

SWEEP 1.0 MC TO 13.0 MC IN 1 MINUTE 55 SECONDS. SEPTEMBER, 1959

TABLE 70

BOMBAY, INDIA (19.0N, 72.8E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MEQ	U 104	U 97	U 95	U 90	D 79	D 76	83	D 94		D 111	D 119	D 119	D 120	U 119	D 121	D 121	D 122	D 122	D 121	D 118		D 116	D 112	U 107
	CNT	8	5	7	14	24	26	19	23		21	21	19	20	8	21	20	20	20	23	24	1	14	11	7
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MEQ					U 310	325	340	U 340																
	CNT				2	9	10	12	7		3	2				1	2	1		2	1		1	1	
	UQ																								
	LQ																								
foF1	MEQ																								
	CNT																								
foE	MED											U 510	U 420			U 470	430	U 410	U 350						
	CNT								1		2	3	4	2		4	7	8	4	1	1				
h'E	MEQ											U 100	U 100			U 80	100	100	U 100						
	CNT								1		1	3	4	2		4	7	8	4	1					
foEs	MEQ																								
	CNT																								

SWEEP 2.5 MC TO 20.0 MC IN 5 MINUTES, MANUAL SEPTEMBER, 1959

TABLE 71

MADRAS, INDIA (13.1N, 80.3E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	130	122	112	96	79	73	92	122	128	136	127	123	124	126	133	136	137	139	133	130	138	137	140	137
	CNT	20	20	20	15	17	24	28	24	24	29	28	24	30	15	29	28	24	27	30	29	23	27	24	29
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED							320	305	270	240	230	230	225	230	230	230	U 240							
	CNT						3	12	23	28	22	14	22	26	12	23	17	6	4	1					
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MEQ																								
	CNT																								
foEs	MEQ																								
	CNT																								

SWEEP 2.5 MC TO 20.0 MC IN 5 MINUTES, MANUAL SEPTEMBER, 1959

TABLE 72

TIRUCHY, INDIA (10.8N, 78.7E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 115	U 114	U 95	U 86	85	71	90	116	128	130	123	120	120	120	126	132	D 135		U 128	D 114			U 118	U 128
	CNT	9	9	6	9	15	19	21	25	23	19	27	28	28	25	29	21	17		23	12	4	4	8	8
	UQ																								
	LQ																								
h'F2	MEQ																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED					U 340	340	340	310	275	240	240	235	230	230	230	235	U 230		128					
	CNT				3	4	8	12	18	21	12	26	27	23	20	23	12	5		2					
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MEQ																								
	CNT																								
h'E	MEQ																								
	CNT																								
foEs	MEQ																								
	CNT																								

SWEEP 2.5 MC TO 20.0 MC IN 5 MINUTES, MANUAL SEPTEMBER, 1959

TABLE 73

KODAIKANAL, INDIA (10.2N, 77.5E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	127	116	U 100	90	79	55	78	110	125	126	118	117	117	118	122	126	130	132	127	114	U 108	U 117	U 128	U 126
	CNT	11	17	17	25	25	25	26	28	28	27	26	26	23	25	26	26	26	27	26	23	9	7	7	8
	UQ																								
	LQ																								
h'F2	MED														2	1	2	2	1						
	CNT																								
	UQ																								
	LQ																								
h'F	MED	270	245	240	240	240	240	270	250	230	220	220	215	210	215	220	230	250	270	320	420	380	330	300	290
	CNT	30	30	30	30	30	30	29	29	28	27	26	26	22	21	20	20	24	24	28	25	21	24	26	29
	UQ																								
	LQ																								
M(3000)F2	MED	290	295	U 305	305	310	320	300	290	250	225	220	220	215	210	220	220	225	225	220	200	U 205	U 225	U 240	U 260
	CNT	11	17	17	25	25	25	26	28	28	27	26	26	23	25	26	26	26	27	25	23	9	7	7	8
	UD																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								280																
	CNT								8	2					1	1	3	1	2						
h'E	MED								115	110	110				115		110	110	120						
	CNT								23	15	8			1	5	4	4	7	5						
foEs	MED	46				U 35	U 45		85	110	118	128	130	126	128	130	116	103	86	U 46		U 38	U 34	40	50
	CNT	8	1	1		4	3	1	28	28	27	26	26	23	25	26	26	26	25	7		3	4	13	13

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS. SEPTEMBER, 1959

TABLE 74

TRIVANDRUM, INDIA (8.5N, 77.0E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 100	U 100	D 95	88	78	56	75	111	127	133	124	118	120	120	124	129	132	134	D 127	D 110		U 113	U 105	U 105
	CNT	7	9	10	12	16	19	25	24	29	10	10	29	30	30	28	30	26	20	21	10	4	6	7	7
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UD																								
	LQ																								
M(3000)F2	MED				U 300					310	325	315	295	260	U 230	230	230	230	235	225	225	230	235	240	260
	CNT		1	1	8					11	16	22	25	26	9	10	29	30	27	25	25	20	12	3	1
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 2.5 MC TO 20.0 MC IN 5 MINUTES, MANUAL SEPTEMBER, 1959

TABLE 75

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 29	U 31	25	29	U 32	28	38	52	U 69	62	66	67	71	71	68	70	64	66	69	60	56	58	40	U 44
	CNT	13	12	9	8	7	8	11	13	10	10	10	9	15	15	17	21	22	17	21	14	13	12	9	12
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UQ																								
	LD																								
M(3000)F2	MED	240	240	235	235	250	260	280	285	280	275	U 270	280	280	275	270	275	265	265	255	250	230	250	240	250
	CNT	12	12	9	7	6	8	11	13	9	11	8	9	16	14	17	19	21	16	21	14	13	12	9	13
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	34	30	38	37	48	40	23	U	27	32	U	30	G	U	29	24	31	29	15	12	E	E	E	14
	CNT	29	28	29	28	29	29	24	25	24	26	27	27	27	27	29	29	28	24	29	29	26	27	28	28

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. SEPTEMBER, 1959

TABLE 76

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	42	40	36	38	45	40	46	60	56	60	66	70	66	68	66	70	70	70	70	62	62	49	45	43
	CNT	18	15	17	15	13	15	16	17	17	24	18	18	21	19	24	22	22	28	25	21	18	19	18	17
	UD																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UQ																								
	LD																								
M(3000)F2	MED	222	230	222	230	240	245	258	268	260	258	260	252	255	245	245	250	240	238	230	230	228	230	225	228
	CNT	16	14	16	15	13	14	16	16	16	20	18	16	14	17	20	19	21	22	19	19	16	17	17	16
	UD																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E 14	E 16	F 17	E 16	E 14	E 16	E 17	E 20	E 20	E 25	E 26	E 25	E 24	E 26	E 24	E 24	E 20	E 20	E 18	E 16	E 15	E 15	E 16	E 14
	CNT	6	18	24	23	6	4	12	11	5	14	12	11	3	13	12	21	9	20	17	13	10	26	26	8

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. SEPTEMBER, 1959

TABLE 77

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	34	U 33	36	33	37	U 34	36	38	48	53	57	60	70	64	65	64	66	70	70	60	67	60	58	54
	CNT	12	11	10	4	5	10	9	8	14	8	12	10	15	20	16	17	17	18	16	13	11	15	8	10
	UQ																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UD																								
	LD																								
M(3000)F2	MED	268	U 255	260	250	260	U 270	260	285	290	278	285	285	290	285	275	280	275	262	272	270	270	275	275	270
	CNT	12	11	10	4	5	10	9	8	13	8	12	20	15	20	16	17	17	18	16	13	11	15	8	10
	UQ																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E		E					E	G								E	E	E	E	E	E	E	E
	CNT	26	20 28	23	35 27	21 26	29 28	28 27	22 27	24 27	23 27	27 26	22 19	27	26 29	32 29	52 30	46 28	20 28	26 27	14 25	21	21	20	12 25

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. AUGUST, 1959

TABLE 78

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	45	36	41	U 44	U 40	37	U 45	40	44	52	60	66	70	70	70	80	80	84	82	77	75	70	63	51
	CNT	13	17	9	7	6	9	8	9	15	16	21	24	18	20	26	40	23	16	22	20	20	19	18	13
	UD																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UD																								
	LQ																								
M(3000)F2	MED	245	250	U 235	U 250	U 252	U 255	U 280	U 240	265	255	260	260	260	255	245	245	240	250	248	260	240	240	250	240
	CNT	11	15	7	5	4	8	5	5	14	14	17	15	12	14	17	12	15	9	14	13	11	11	15	11
	UQ																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	CNT	12 9	14 10	14 10	13 10	14 14	14 10	15 10	13 7	14 10	14 9	15 12	17 12	18 12	17 14	18 16	16 17	14 9	13 9	14 14	13 12	13 11	15 26	13 10	13 9

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. AUGUST, 1959

TABLE 79

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	46	40	32	U 34	U 35	U 41	U 37	U 37	U 48	U 40	U 53	65	63	65	65	65	69	80	72	73	70	U 67	54	U 33
	CNT	9	10	10	6	4	8	5	1	6	3	8	9	9	13	15	15	16	14	16	11	12	5	10	8
	UD																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UQ																								
	LD																								
M(3000)F2	MED	270	250	250	U 255	U 280	U 260	U 270	U 240	U 270	U 275	U 290	U 290	290	290	280	275	280	280	280	275	280	U 265	275	U 240
	CNT	9	10	10	6	4	8	5	1	6	3	8	8	9	13	15	15	16	14	16	11	12	5	10	8
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED		G				E		E									E	E	E	E	E	E	E	E
	CNT	14 20	15	26 20	25 18	28 18	19 16	14 15	22 17	25 17	33 20	28 18	43 19	35 17	48 21	61 21	59 21	56 22	30 22	46 22	15 17	16 20	11 9	8	12 11

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. JULY, 1959

TABLE 80

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	53	33	U 47	U 34	U 41	U 47	37	44	35	43	49	54	67	66	66	68	76	80	70	77	70	54	46	54
	CNT	9	12	7	7	4	5	13	9	9	12	11	9	9	14	14	16	16	16	16	16	13	14	10	13
	UD																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UQ																								
	LD																								
M(3000)F2	MED	U 250	230	U 242	U 250	U 230	U 270	265	U 235	U 252	258	248	250	U 260	260	255	250	250	260	242	U 258	250	240	245	230
	CNT	7	10	6	7	4	4	12	4	8	10	10	9	8	11	11	12	13	11	12	8	12	13	9	12
	UD																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	CNT	14 8	16 15	18 11	19 17	15 10	13 5	14 8	14 9	14 7	15 9	17 19	14 7	15 6	16 8	16 12	15 9	15 11	14 12	14 9	13 7	14 19	15 20	12 5	16 18

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. JULY, 1959

TABLE 81

DELHI, INDIA (28.6N, 77.2E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 89	D 87		U 84	D 81	D 84	D 90	D 95	99	101	110	116	122	126	D 124	D 126	D 125	D 118	D 116	D 105	D 93	D 91	D 90	D 89
	CNT	29	29	3	5	20	27	28	24	23	22	26	20	23	24	24	26	26	27	26	27	25	23	26	25
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED						U 280	U 310	U 305	300	280	265	260	270	270	280	280	U 280	U 295	U 300	U 280			U 260	
	CNT	3	1	1	1	3	8	9	8	18	19	23	18	20	17	11	11	8	7	6	6	4	1	5	3
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								U 290	U 380															
	CNT								3	3	1	1						-	-						
h'E	MED								U 100																
	CNT								3	2	1	1						1	1						
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL JUNE, 1959

TABLE 82

AHMEDABAD, INDIA (23.0N, 72.6E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	86	81	80	75	70	70	82	94	96	102	109	117	128	134	141	145	143	143	139	129	110	98	89	88
	CNT	23	27	21	21	21	25	21	22	22	24	28	28	27	27	27	27	25	26	27	26	25	27	26	23
	UQ																								
	LQ																								
h'F2	MED									250	325	360	400	435	420	415	400	375	350						
	CNT									23	25	28	26	26	26	27	27	26	20						
	UQ																								
	LQ																								
h'F	MED	340	305	310	305	300	300	250	250	250	240	250	250	275	290	290	250	250	260	265	300	305	340	350	350
	CNT	26	27	25	25	22	25	23	24	23	16	18	14	17	17	17	18	16	21	28	24	26	28	26	24
	UQ																								
	LQ																								
M(3000)F2	MED	250	255	255	255	255	260	300	290	275	255	240	235	235	240	240	245	250	255	260	255	250	240	240	240
	CNT	24	27	22	22	21	25	22	22	22	24	26	28	27	27	27	27	26	27	27	23	25	27	26	24
	UQ																								
	LQ																								
foF1	MED									1	580 11	600 12	610 11	620 16	600 17	610 16	610 17	570 12	550 6						
	CNT																								
foE	MED							210	300	350	400	400	400	420	430	410	400	370	320	240					
	CNT							12	10	8	12	7	9	4	5	7	15	14	12	7					
h'E	MED							117	110	110	110	110	110	110	110	110	110	110	110	117					
	CNT							10	11	11	14	15	16	11	10	13	17	17	16	6					
foEs	MED	24	24	25	23	20	20	28	33	44	41	45	53	58	58	50	38	47	41	32	33	25	25	28	33
	CNT	26	27	24	24	23	25	23	24	23	23	27	24	22	20	20	26	25	28	28	25	26	28	26	25

SWEEP 0.6 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC JUNE, 1959

TABLE 83

BOMBAY, INDIA (19.0N, 72.8E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	D 94	92	D 81	D 74	D 68	78	85	96		O 106	O 114	124	D 127	O 133	D 132	D 134	D 134	O 134	O 134	O 129		D 114	D 110	D 105
	CNT	21	15	19	23	26	19	21	18	1	12	26	18	28	12	28	28	27	25	26	27	2	19	20	23
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	U 280	U 285	U 300	U 295	310	325	340	320		300	280	U 270	260		U 250				U 275				U 290	
	CNT	7	8	7	7	11	13	16	14	2	11	13	9	10	-	6	4	4	1	5	-			2	6
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED								U 320		U 400	U 430	U 520	U 440		U 470	U 430								
	CNT							4	5		6	9	3	3		4	5	-	1	-					
h'E	MED								U 80		U 100	U 100	U 100	U 100		U 100	U 100								
	CNT							2	5		6	9	3	3		4	5	-	1	2					
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL JUNE, 1959

TABLE 84

MADRAS, INDIA (13.1N, 80.3E) TIME 75.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	100	93	90	88	78	72	94	107	113	114	116	116	114	112	117	118	121	122	122	110	103	100	100	100
	CNT	30	27	29	23	27	26	30	28	27	30	30	30	27	21	29	29	30	26	30	27	25	23	23	30
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED						U 315	300	285	260	230	225	225	220	215	220	225	U 230	U 230						
	CNT					1	7	20	23	22	22	19	18	15	13	18	16	8	5	2			1		
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MEO																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL JUNE, 1959

TABLE 85

TRIVANDRUM, INDIA (8.5°N, 77.0°E) TIME 75.0°E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 101	U 97		U 85	U 74	59	94	106	116	118	115	114	112	107	110	112	115		117	U 114	U 104	U 104	U 100	U 104
	CNT	5	5	4	7	8	17	14	28	49	45	47	47	49	47	48	30	42		44	18	8	9	6	5
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UD																								
	LQ																								
M(3000)F2	MED						340	U 320	290	265	240	230	225	220	220	220	220	220		240	U 230				
	CNT	1			1	2	11	8	21	42	22	27	24	25	23	22	25	11		11	5	1		4	1
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL JUNE, 1959

TABLE 86

ANNAMALAI NAGAR (11.4°N, 79.7°E) TIME 75.0°E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	92	86	80	75	72	60	83	103	116	117	118	114	110	106	110	110	114	118	118	108	101	97	94	U 97
	CNT	12	13	14	13	14	16	25	28	30	30	30	30	29	30	28	29	30	28	32	27	17	12	14	11
	UQ																								
	LQ																								
h'F2	MED																1	1							
	CNT																								
	UQ																								
	LQ																								
h'F	MED	320	325	320	305	265	240	265	240	230	220	210	200	205	200	210	220	240	260	290	300	375	390	370	335
	CNT	28	27	27	30	30	30	30	29	29	27	29	29	27	28	28	28	25	24	30	26	14	16	21	28
	UD																								
	LQ																								
M(3000)F2	MED	290	280	280	280	295	310	290	275	250	230	220	215	210	210	210	210	220	225	235	220	215	220	235	U 255
	CNT	12	13	14	13	14	18	25	28	30	30	30	30	29	30	30	30	30	28	30	27	17	12	14	11
	UQ																								
	LQ																								
foF1	MED																1								
	CNT																								
foE	MED							230	300	360								340	490						
	CNT							17	10	6	2	1			1	1	2	5	9						
h'E	MED							120	110	110	110						110	115	120						
	CNT							24	16	12	6	3	1	1	2	2	7	12	14	1					
foEs	MED	36	49	40	50	44	G		98	121	126	142	147	150	146	140	128	109	90	40			26	35	42
	CNT	14	16	14	11	6	2	26	29	30	30	30	29	29	30	30	30	30	27	22	4	4	12	16	19

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS, JUNE, 1959

TABLE 87

TRIVANDRUM, INDIA (8.5°N, 77.0°E) TIME 75.0°E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 100	U 88	U* 80	U 74	64	60	81	106	121	127	125	118	114	110	110	112	116	D 114	D 108	U 98	U 98	U 102	U 108	U 110
	CNT	7	8	4	4	11	13	21	26	24	21	26	28	26	28	22	28	26	29	29	25	9	6	7	9
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED			U 285	U 285	300	320	300	285	265	250	230	230	225	225	225	225	225	230						
	CNT	3	4	7	9	11	13	20	25	20	19	20	20	20	27	21	27	21	10	4	3		1	4	1
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.5 MC TO 18.0 MC IN 5 MINUTES, MANUAL JUNE, 1959

TABLE 88

MAWSON (67.6°S, 62.9°E) TIME 0.0°E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED							80	95	95	112	118	110	105	90										
	CNT					1	4	9	10	18	20	19	19	20	16	3									
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UD																								
	LQ																								
h'F	MED							270	455	260	250	250	250	250	250										
	CNT					1	4	9	10	17	20	19	19	20	16	3									
	UQ																								
	LQ																								
M(3000)F2	MED							300	300	300	300	300	300	300	300										
	CNT					1	4	9	10	18	20	19	19	20	16	3									
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.0 MC TO 20.0 MC IN 15 SECONDS, JUNE, 1959

TABLE 89

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 45	38	39	34	34	36	36	46	41	49	U 54	46	58	58	62	66	72	69	69	71	64	58	49	50
	CNT	13	14	10	8	10	13	12	8	12	8	13	11	17	15	22	17	24	23	21	20	12	15	13	14
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	270	265	260	272	280	270	272	300	270	282	280	275	280	280	280	275	270	270	275	270	<80	265	270	265
	CNT	13	14	9	8	9	13	12	7	11	8	13	11	17	15	22	17	23	23	21	20	11	15	13	13
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E		G																E	E	E	E
	CNT	12	13	12	28	22		32	27	38	28	20	30	28	55	57	52	48	38	20	17	13	12	12	12
		21	20	13	30	29	29	28	29	49	28	27	27	28	27	28	26	28	29	30	29	27	25	22	20

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. JUNE, 1959

TABLE 90

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	42	34	44	27	U 39	U 35	U 34	U 38	U 46	U 38	42	57	59	64	66	70	70	69	80	84	70	68	55	52
	CNT	15	11	9	9	8	6	8	7	7	7	11	10	16	18	15	20	18	18	19	19	15	16	16	14
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	240	240	245	235	U 240	U 238	U 265	U 290	U 245	U 265	240	245	250	248	250	245	245	248	255	250	250	250	235	230
	CNT	15	11	9	9	8	6	8	7	7	7	11	10	16	18	14	17	15	12	13	13	9	14	15	12
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	CNT	13	14	14	16	12	13	13	12	13	13	14	14	13	16	16	14	12	12	11	11	11	11	13	11
		22	21	18	18	6	13	12	11	11	9	9	8	10	16	16	15	10	9	7	9	9	9	21	8

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. JUNE, 1959

TABLE 91

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	44	46	37	35	40	46	45	50	50	67	74	68	68	68	70	75	78	77	80	78	70	64	58	55
	CNT	19	12	16	11	8	11	13	15	14	14	20	16	20	15	18	20	21	22	25	25	23	15	21	17
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	260	265	260	255	270	275	280	280	290	280	<80	280	290	285	275	265	270	265	275	275	270	265	270	260
	CNT	19	12	16	10	8	11	13	15	14	14	20	16	20	15	18	20	21	22	25	25	23	15	21	17
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	G			E	E	E		E	E	E	E	E	E	E	E	E	E	E	E
	CNT	18	15	16	35	26		21	23	30	29	23	32	26	0	42	67	54	27	16	14	12	12	12	
		24	23	20	23	29	19	20	22	24	23	23	24	24	23	25	27	28	27	24	21	22	19	18	15

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. MAY, 1959

TABLE 92

SCOTT BASE (77.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	45	45	52	50	52	U 38	U 48	40	51	64	66	68	70	71	73	80	86	80	80	78	74	72	54	53
	CNT	10	14	10	13	10	8	8	12	10	11	17	19	19	19	18	21	22	23	21	18	16	19	20	14
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	228	230	232	252	235	U 238	U 232	240	245	240	255	258	250	245	245	240	260	255	242	248	<45	245	250	242
	CNT	10	14	10	10	10	8	8	13	10	9	15	16	15	16	12	17	19	17	18	16	15	17	17	14
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	CNT	14	16	14	14	13	14	13	14	14	13	17	18	21	30	20	20	14	14	13	14	12	13	13	12
		10	18	14	14	14	15	16	12	16	9	17	20	21	23	22	21	13	17	12	16	10	17	14	19

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. MAY, 1959

CAPE HALLETT (72.3S, 170.2E) TIME [illegible]

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	52	48	42	40	40	44	54	62	72	76	82	80	78	81	86	83	80	84	94	86	84	78	66	57
	CNT	16	14	15	17	16	14	12	18	18	21	22	20	22	24	22	25	23	23	23	20	17	20	18	14
	UQ																								
	LD																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	245	255	250	252	242	241	270	285	281	301	292	30	296	281	269	30	270	270	265	260	275	265	270	250
	CNT	16	14	15	14	16	14	1	16	18	1		20	22	24	22	25	27	24	25	25	1	2	16	14
	UQ																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E				F				L			F							E	E	E	E	E	E
	CNT	14	33	37	34	14	42	11	18			27		34	29	31	30	24	30	16					
		22	23	22	24	19	25	24	23	23	4	22	23	27	27	27	26	28	28	21	18	17	20	17	14

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. APRIL, 1959

TABLE 94

[illegible] (77.9S, 166.8E) TIME [illegible]

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	61	56	42	46	52	60	62	62	58	71	68	76	82	80	82	83	88	90	90	90	84	80	68	66
	CNT	15	10	15	17	13	9	9	11	12	15	15	15	16	15	16	16	15	16	15	15	14	15	15	10
	UD																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UD																								
	LQ																								
M(3000)F2	MED	240	235	230	221	230	U 245	250	235	266	262	265	258	265	275	255	250	240	235	235	240	238	248	235	U 245
	CNT	15	9	15	16	13	8	7	10	9	10	13	10	11	11	10	11	7	11	9	11	10	10	13	7
	UQ																								
	LD																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	E	E	E	E	E	E	G	G	22	G	G		C	E	E	E	E	E		E	E
	CNT	9	5	14	13	17	15	13	14	17	22	21	21	22	19	23	21	18	13	13	12	13	14	12	13
				19	14													24	20	13	18				

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. APRIL, 19[illegible]

TABLE [illegible]

MACAL (22.2N, 113.6E) TIME 120.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	154	150	148	140	110	85	80	102	120	135	140	148	150	150	152	151	150	150	150	150	150		150	151
	CNT	17	17	10	8	5	11	12	10	43	28	30	30	30	30	31	28	29	23	25	21	9	3	14	8
	UD	158	153	150	144	118	95	85	110	125	140	145	150	150	152	154	154	154	154	153	152	151		152	154
	LQ	149	150	145	140	100	75	66	90	115	130	140	145	149	150	150	150	150	150	150	150	149		150	150
h'F2	MED																								
	CNT																								
	UQ																								
	LD																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	260	260	270	255	215	205	205	205	230	230	220	215	210	205	205	210	210	215	220	220	225		260	270
	CNT	16	18	9	8	5	11	12	10	22	27	30	30	30	30	31	29	29	23	25	21	9	4	13	8
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED									300	350	370						360	300						
	CNT								2	20	13	7	2			1	4	13	17	2					
h'E	MED																								
	CNT																								
foEs	MED																								
	CNT																								

SWEEP 1.0 MC TO 20.0 MC IN 15 SECONDS. MARCH, 1959

TABLE 96

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
foF2	MED	54	46	42	44	45	54	62	72	87	84	78	79	80	78	80	79	80	88	87	80	80	70	74	59	
	CNT	22	18	19	18	16	18	26	26	27	28	24	24	27	27	27	28	27	28	30	30	27	27	22	20	
	UD																									
	LD																									
h'F2	MED																									
	CNT																									
	UQ																									
	LD																									
h'F	MED																									
	CNT																									
	UD																									
	LQ																									
M(3000)F2	MED	250	250	230	240	260	270	280	290	280	265	280	270	270	270	270	265	260	260	260	250	260	265	260	255	
	CNT	22	18	19	18	16	18	26	25	27	28	24	24	27	29	27	27	27	29	30	30	27	27	22	20	
	UQ																									
	LQ																									
foF1	MED																									
	CNT																									
foE	MED																									
	CNT																									
h'E	MED																									
	CNT																									
foEs	MED	17	20	27	28	G	G	G	G	G		34	G	34	46	37	44	48	30	G	18	G		13	14	12
	CNT	25	27	29	27	21	24	24	28	30	30	29	29	28	28	29	30	28	28	26	27	24		26	27	26

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. MARCH, 1959

TABLE 97

SCOTT BASE 177.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	54	38	45	44	46	60	57	56	66	68	68	70	70	74	76	71	79	81	80	80	76	71	68	U 56
	CNT	12	10	13	12	12	16	14	16	21	20	17	20	23	22	22	21	22	22	23	22	16	16	14	8
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	230	230	225	235	230	245	260	255	250	255	250	245	245	245	240	240	240	232	240	235	235	225	235	U 228
	CNT	9	10	12	12	11	14	12	12	19	20	16	17	20	19	16	19	18	16	20	19	13	12	12	8
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	E	E	G	G			G	G	G	G	G	G	G	G	G	G	G	G	G	U	E	E	E
	CNT	17	20	23	21	22	24	22	21	20	22	20	23	22	22	23	24	21	23	23	19	20	21	18	24

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. MARCH, 1959

TABLE 98

CAPE HALLETT (72.3S, 170.2E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	44	42	40	37	47	53	54	63	64	74	71	68	67	64	68	66	67	70	67	70	70	64	60	45
	CNT	16	20	21	18	16	18	20	20	22	19	26	21	24	25	25	26	27	28	28	28	25	25	20	21
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	240	250	250	255	260	260	260	250	265	260	250	240	250	240	245	240	250	250	250	250	250	250	245	245
	CNT	15	19	20	18	15	18	18	19	20	18	24	21	23	25	24	25	26	28	27	27	25	25	20	21
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	18	18	22	24	30	33	28	G	G	G	G	G		G		35	37	34	33	G	G	G	G	G
	CNT	23	26	26	24	23	25	23	20	22	24	24	23	25	24	26	27	27	25	26	25	24	25	25	25

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS. FEBRUARY, 1959

TABLE 99

SCOTT BASE 177.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	U 42	U 42	U 42	U 44	U 33	U 54	U 68	U 72	U 56	U 44	U 69	U 71	U 74		U 64	U 54	U 66	U 69	U 58	U 54	U 57	U 60	U 56	U 46
	CNT	2	5	5	3	3	3	4	2	2	1	3	3	2		3	3	5	5	2	4	5	5	4	4
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	U 235	U 220	U 230	U 240	G	U 220	U 232	U 225	U 250	G	U 220	U 230	U 232		U 215	U 220	U 225	U 228	U 220	U 210	U 220	U 215	U 228	U 220
	CNT	2	5	5	3	3	3	4	2	2	1	3	3	2		3	3	5	4	2	3	5	5	4	4
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	E	G	G	E	G	E	E	E	E	U	E	E	U	G	G	E	G	G	G	G	G	U	E	E
	CNT	26			22		22	26	33	34	34	42	36	32			31					26	27	25	26
		3	1	1	2	1	2	2	3	4	2	2	3	4	2	3	4	2	4	3	1	2	4	3	4

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. FEBRUARY, 1959

TABLE 100

SCOTT BASE 177.9S, 166.8E) TIME 165.0E

HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
foF2	MED	55	55	53	50	52	55	62	59	60	58	58	58	57	60	63	64	64	68	66	64	58	60	59	52
	CNT	13	14	11	12	11	14	15	10	15	16	11	14	13	12	15	15	16	14	14	12	15	15	11	12
	UQ																								
	LQ																								
h'F2	MED																								
	CNT																								
	UQ																								
	LQ																								
h'F	MED																								
	CNT																								
	UQ																								
	LQ																								
M(3000)F2	MED	225	230	230	235	230	222	225	225	230	220	U 210	220	215	225	220	220	220	225	225	220	220	230	230	230
	CNT	13	14	11	11	11	14	13	13	14	13	7	13	12	11	15	15	17	13	14	12	15	13	11	12
	UQ																								
	LQ																								
foF1	MED																								
	CNT																								
foE	MED																								
	CNT																								
h'E	MED																								
	CNT																								
foEs	MED	G	G	G	G	G	G	G	G	G	G	G	G	U	U	U	U	U	U	U	U	U	U	U	U
	CNT	17	18	18	18	18	17	17	17	16	18	18	18	17	16	17	16	16	15	16	17	17	18	18	19

SWEEP 1.0 MC TO 22.0 MC IN 7 SECONDS. JANUARY, 1959

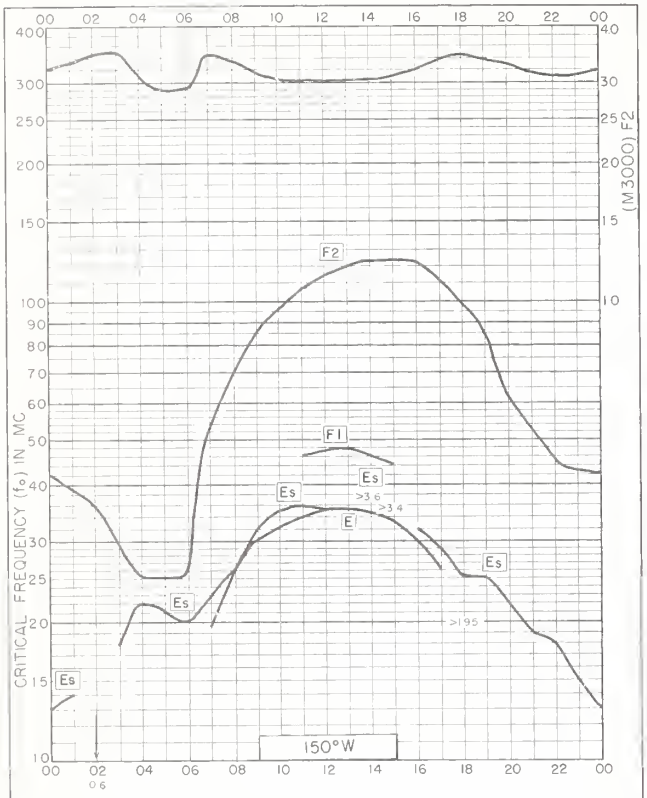


Fig. 1. MAUI, HAWAII
20.8°N, 156.5°W MARCH 1962

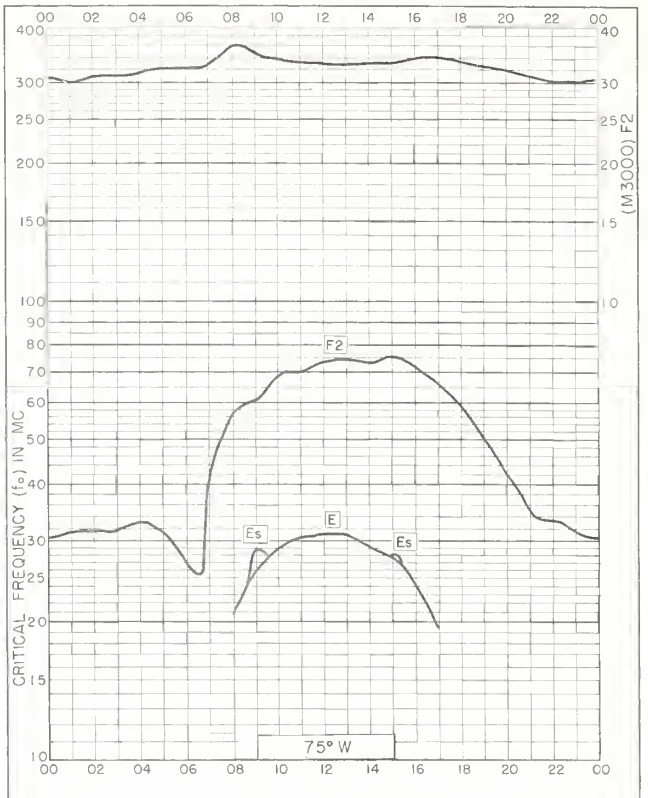


Fig. 2. WASHINGTON, D.C
38.7°N, 77.1°W FEBRUARY 1962

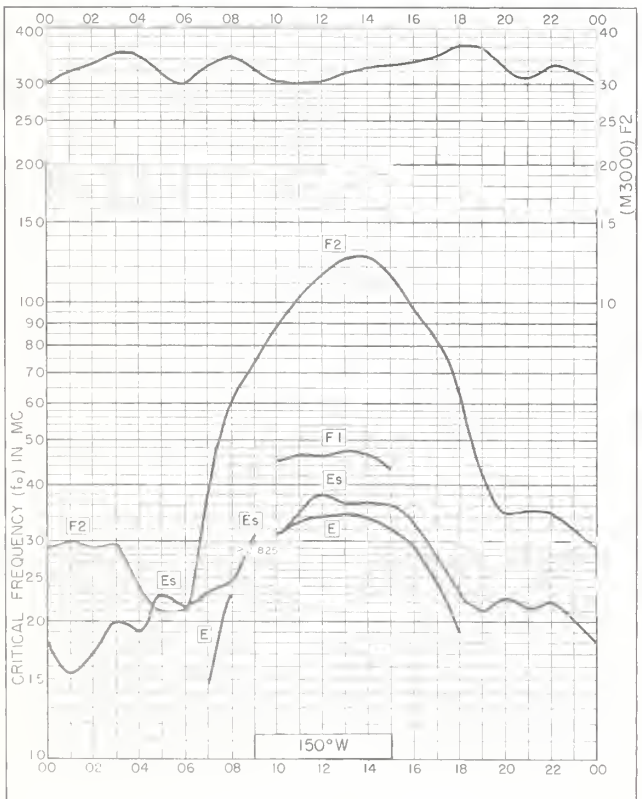


Fig. 3. MAUI, HAWAII
20.8°N, 156.5°W FEBRUARY 1962

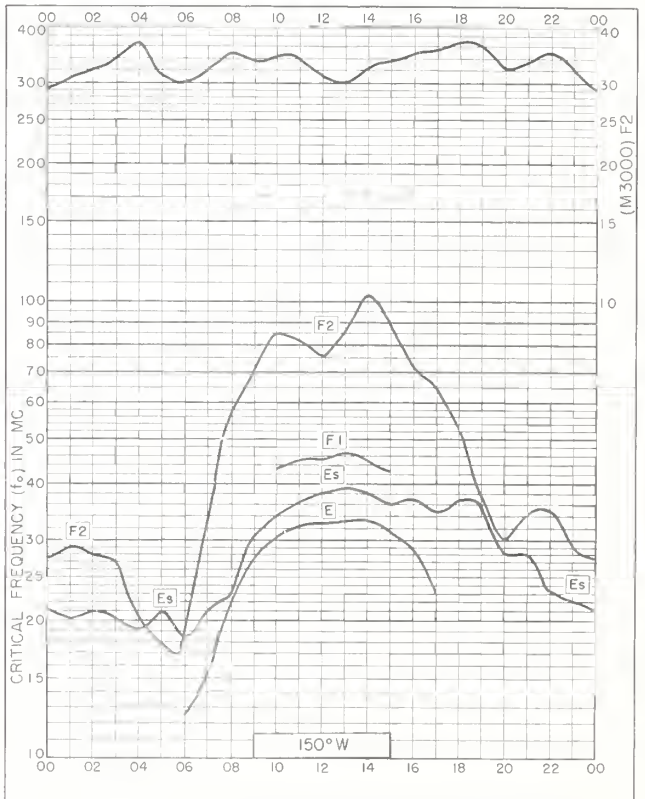


Fig. 4. MAUI, HAWAII
20.8°N, 156.5°W JANUARY 1962

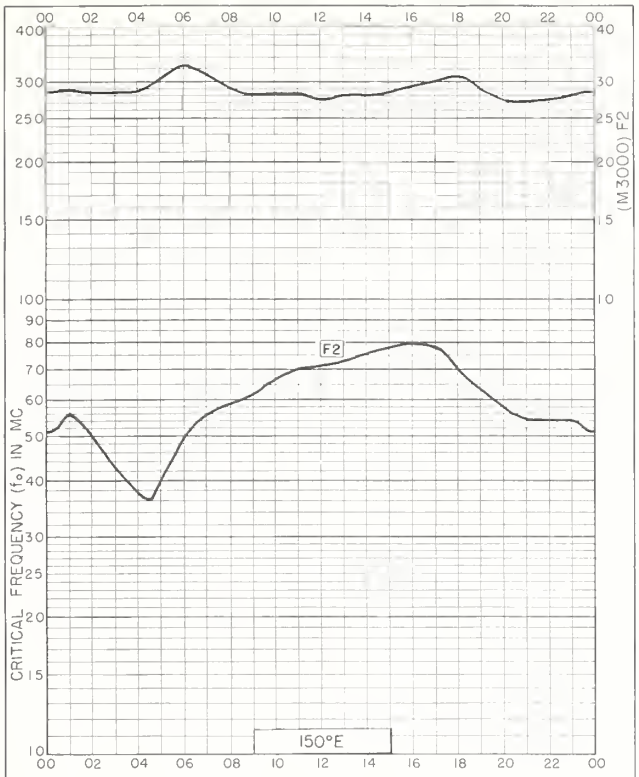


Fig. 5. BRISBANE, AUSTRALIA
27.5°S, 152.9°E JANUARY 1962

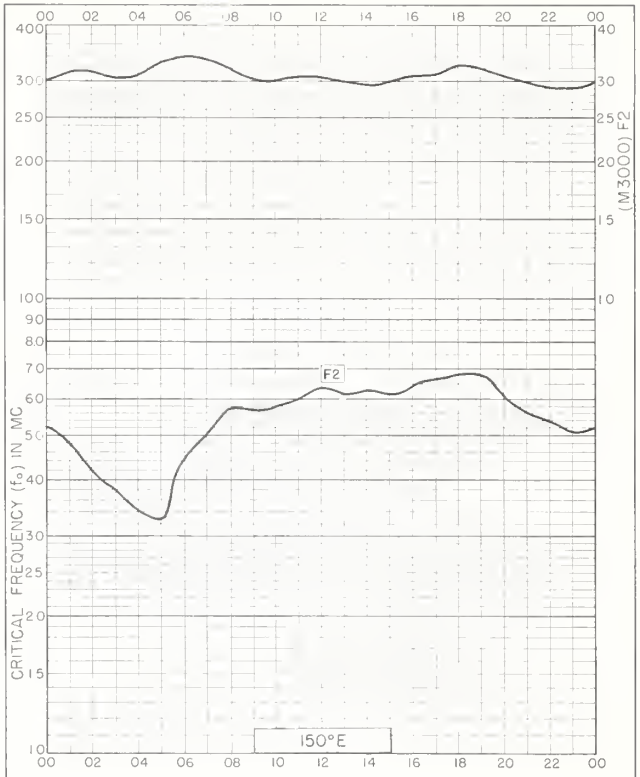


Fig. 6. CANBERRA, AUSTRALIA
35.3°S, 149.0°E JANUARY 1962

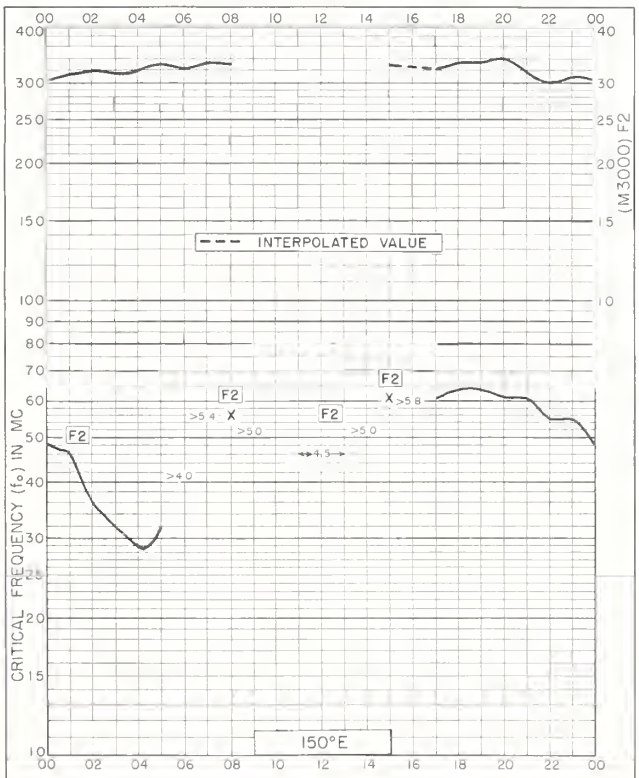


Fig. 7. HOBART, TASMANIA
42.9°S, 147.2°E JANUARY 1962

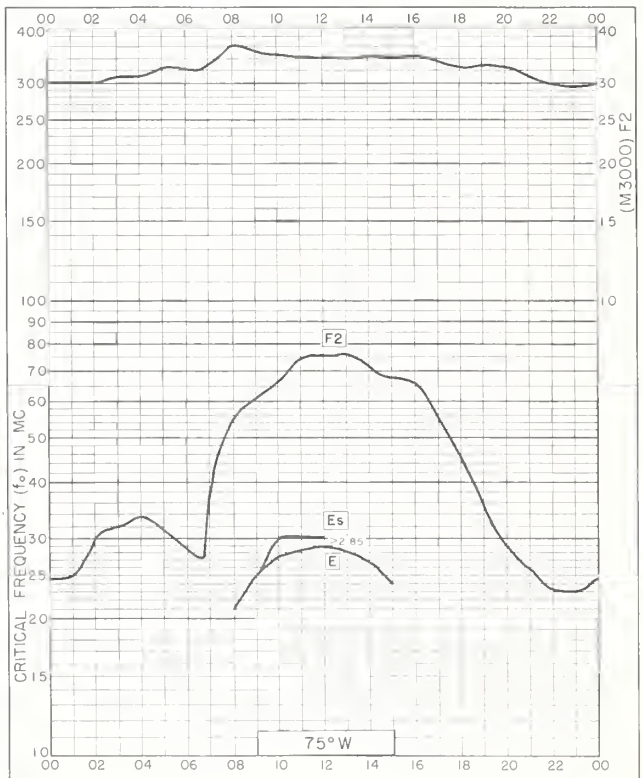


Fig. 8. FT. MONMOUTH, NEW JERSEY
40.4°N, 74.1°W DECEMBER 1961

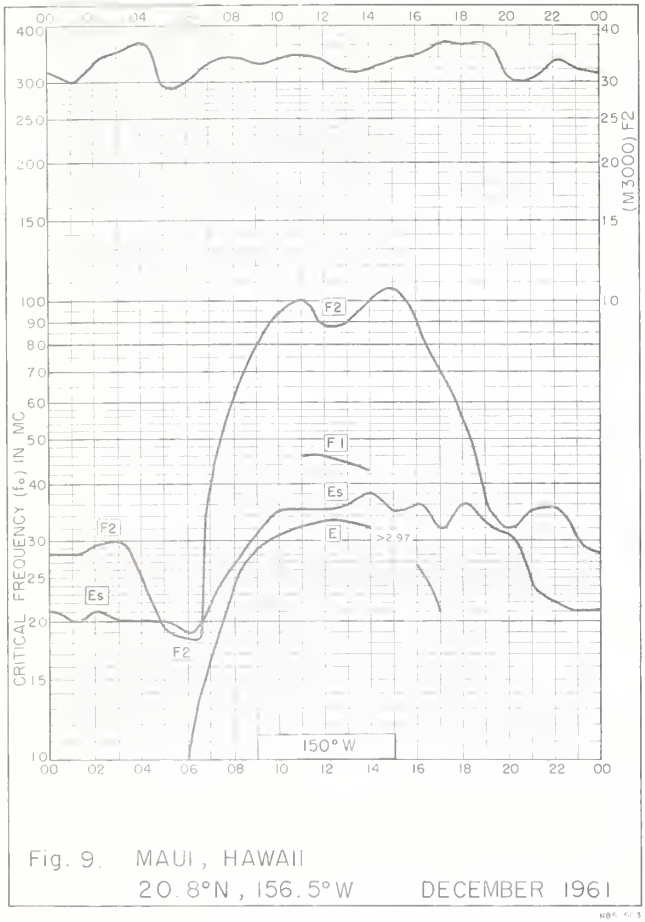


Fig. 9. MAUI, HAWAII
20.8°N, 156.5°W DECEMBER 1961

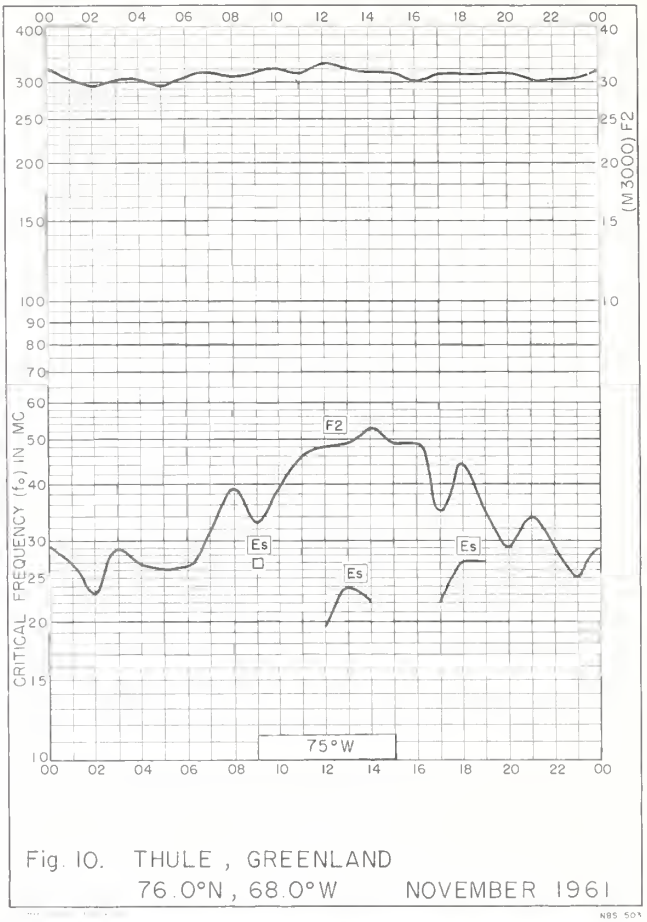


Fig. 10. THULE, GREENLAND
76.0°N, 68.0°W NOVEMBER 1961

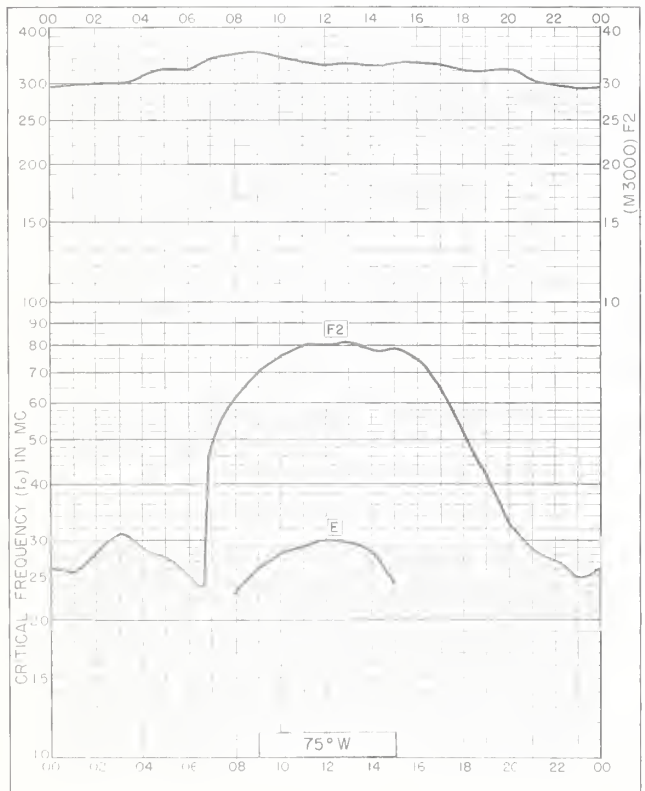


Fig. 11. FT. MONMOUTH, NEW JERSEY
40.4°N, 74.1°W NOVEMBER 1961

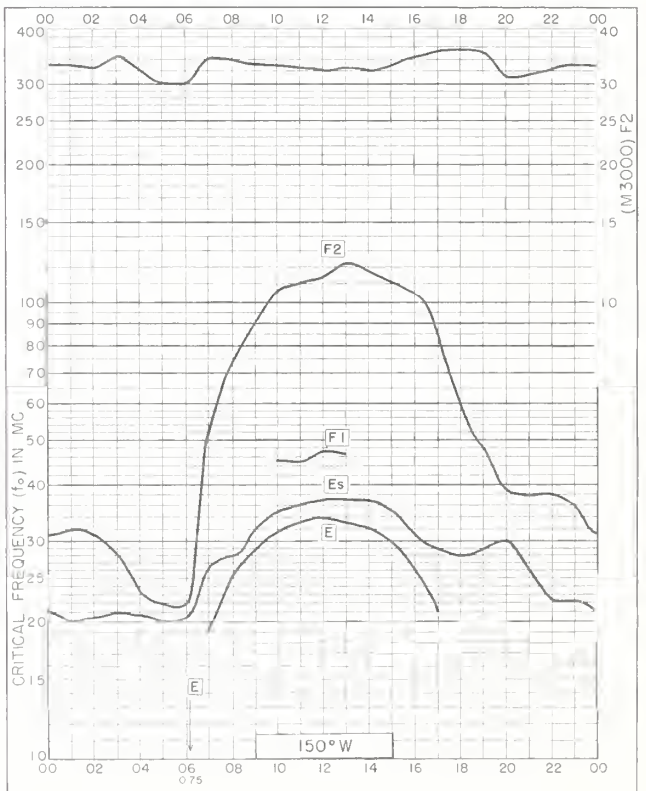


Fig. 12. MAUI, HAWAII
20.8°N, 156.5°W NOVEMBER 1961

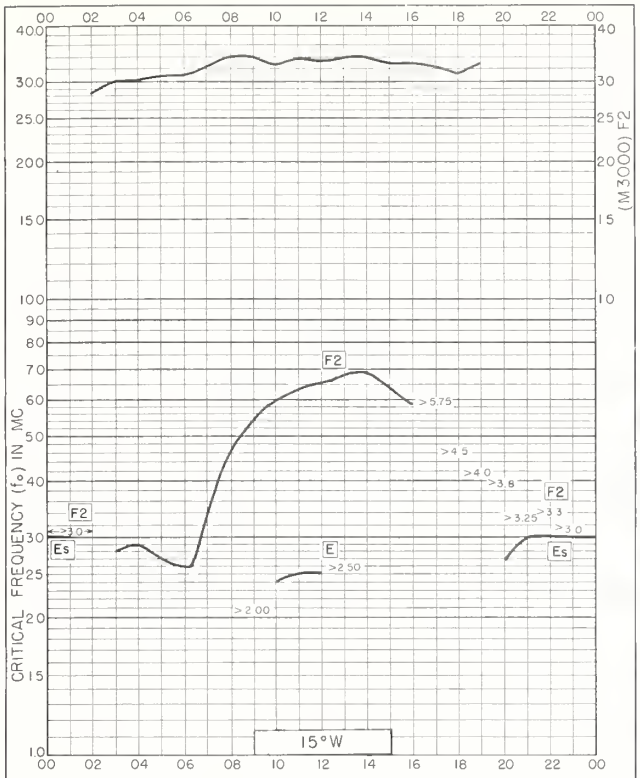


Fig. 13. REYKJAVIK, ICELAND
64.1°N, 21.8°W OCTOBER 1961

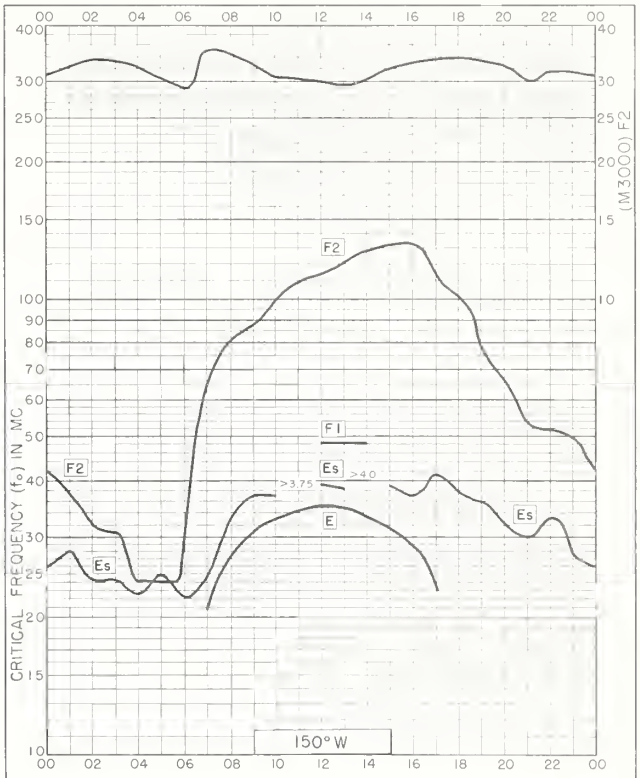


Fig. 14. MAUI, HAWAII
20.8°N, 156.5°W OCTOBER 1961

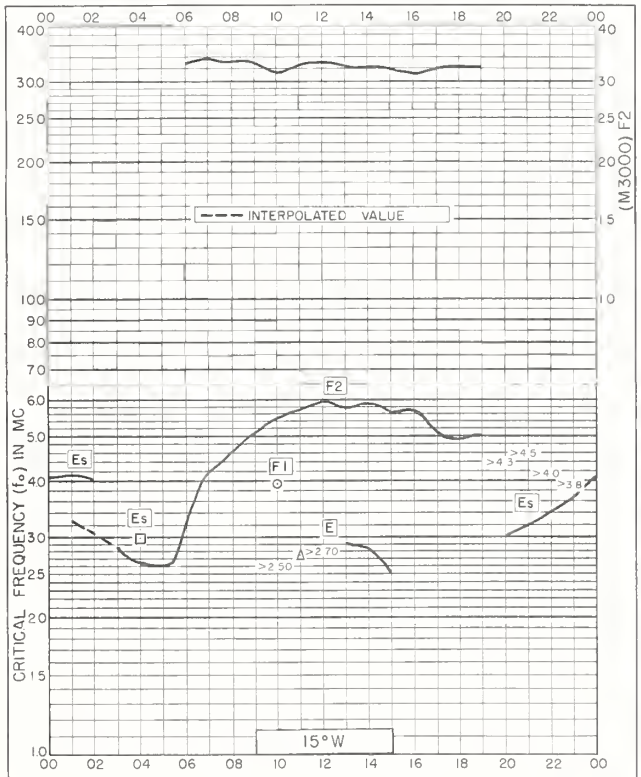


Fig. 15. REYKJAVIK, ICELAND
64.1°N, 21.8°W SEPTEMBER 1961

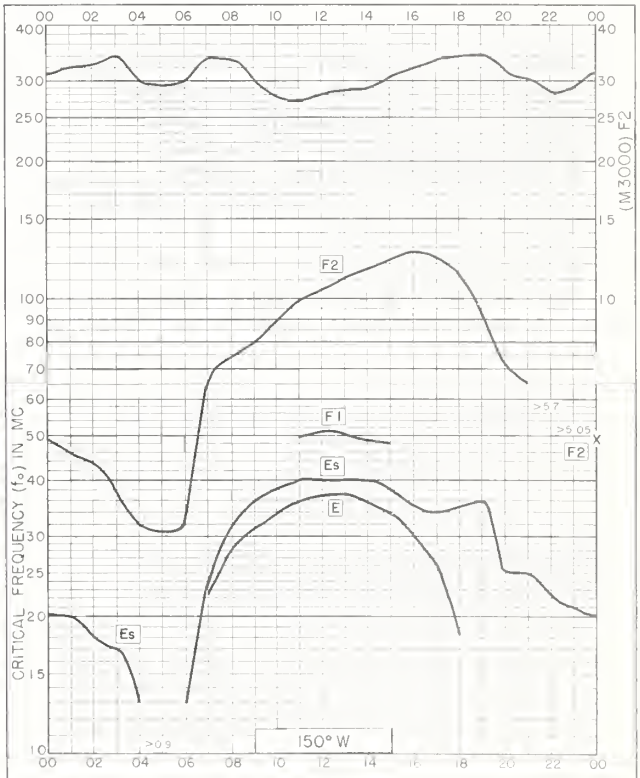


Fig. 16. MAUI, HAWAII
20.8°N, 156.5°W SEPTEMBER 1961

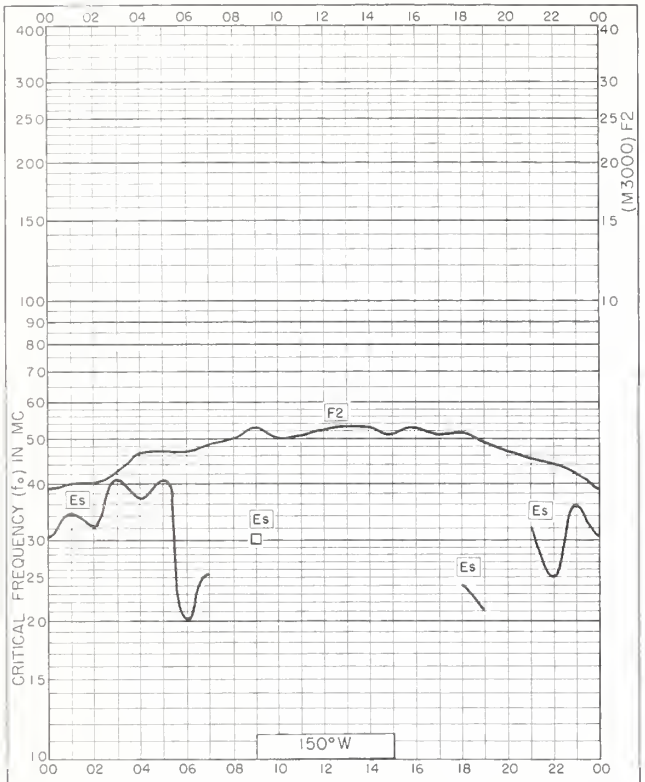


Fig. 17. FAIRBANKS, ALASKA
64.9°N, 147.8°W AUGUST 1961



Fig. 18. MAUI, HAWAII
20.8°N, 156.5°W AUGUST 1961

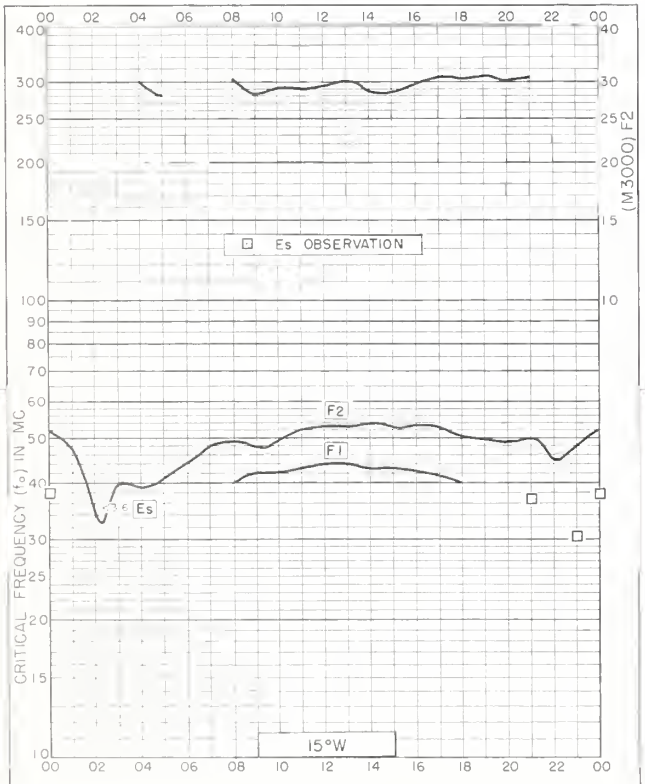


Fig. 19. REYKJAVIK, ICELAND
64.1°N, 21.8°W JULY 1961

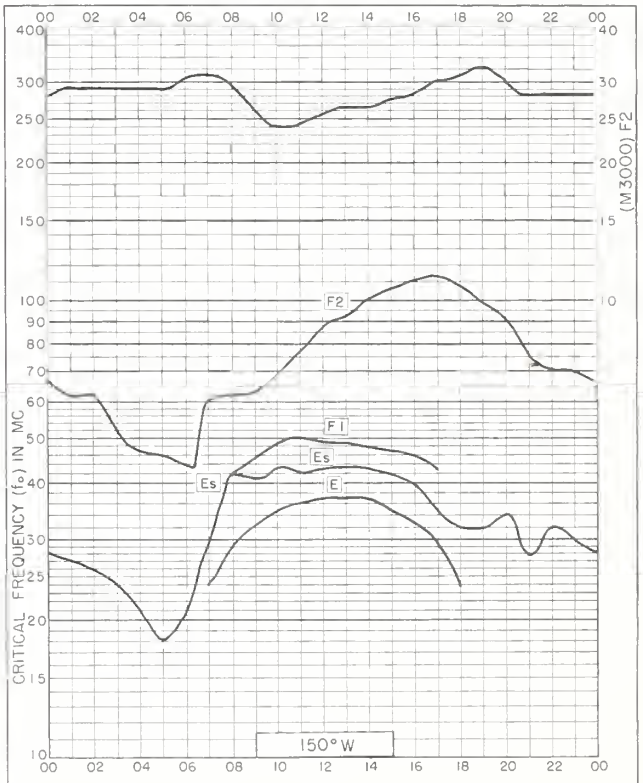


Fig. 20. MAUI, HAWAII
20.8°N, 156.5°W JULY 1961

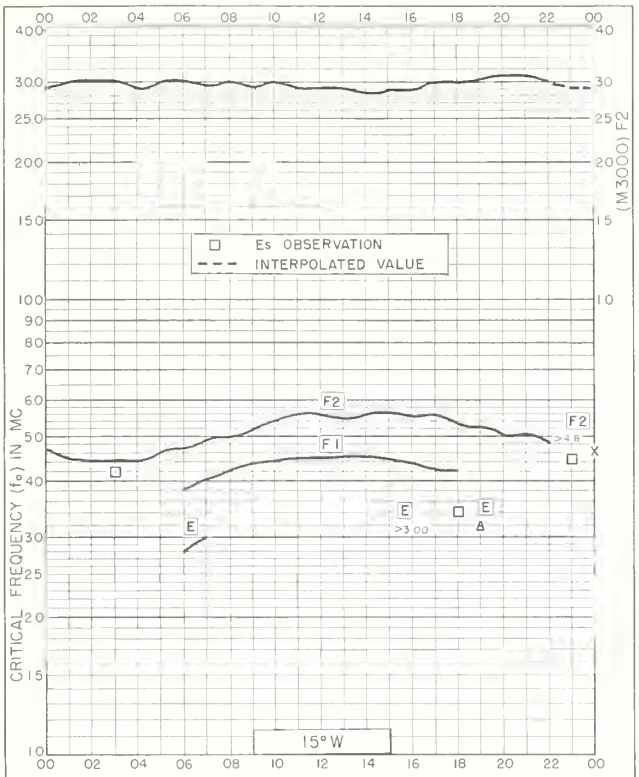


Fig. 21. REYKJAVIK, ICELAND
64.1°N, 21.8°W JUNE 1961

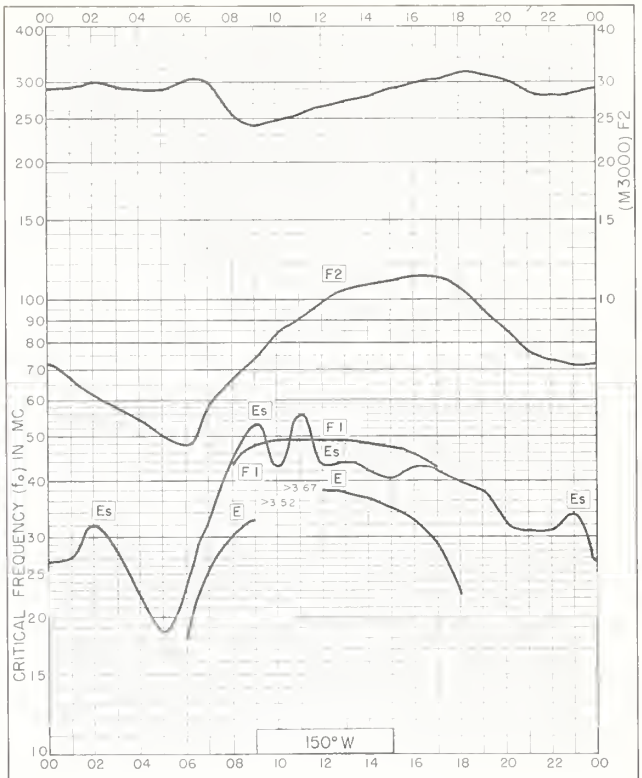


Fig. 22. MAUI, HAWAII
20.8°N, 156.5°W JUNE 1961

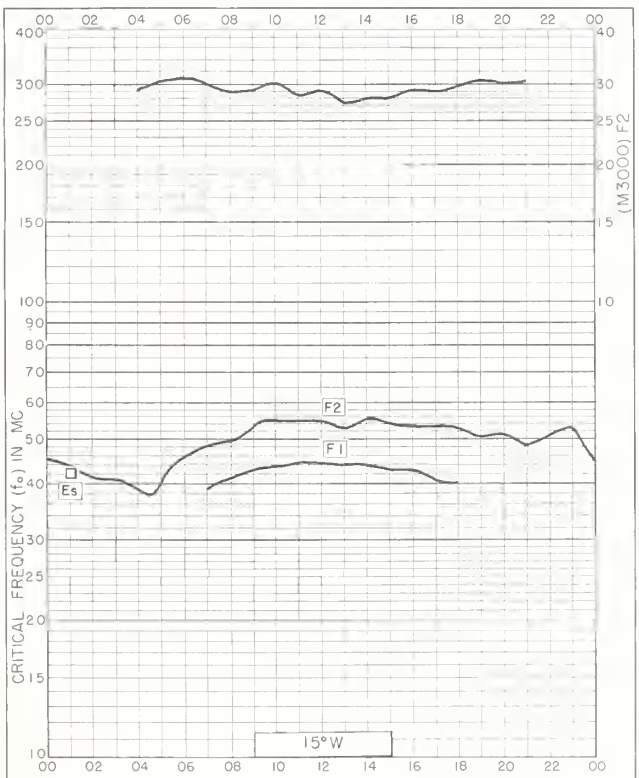


Fig. 23. REYKJAVIK, ICELAND
64.1°N, 21.8°W MAY 1961

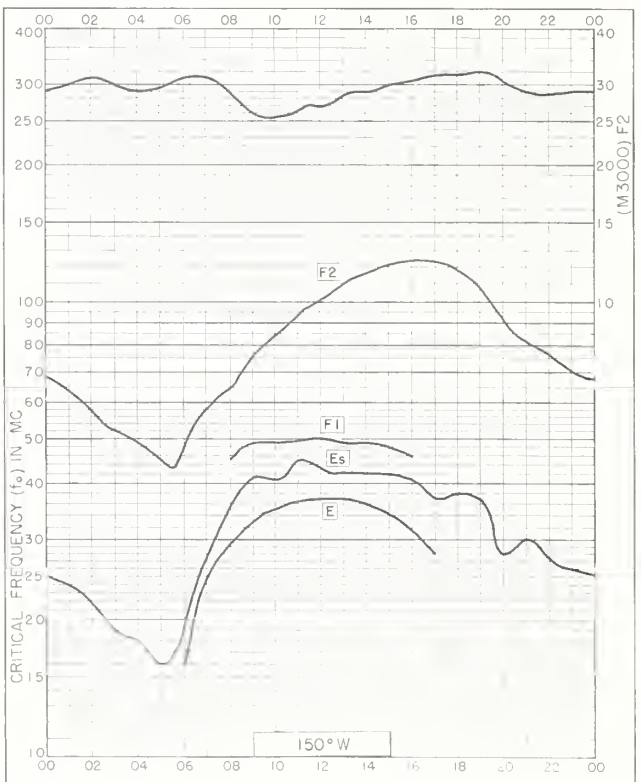


Fig. 24. MAUI, HAWAII
20.8°N, 156.5°W MAY 1961

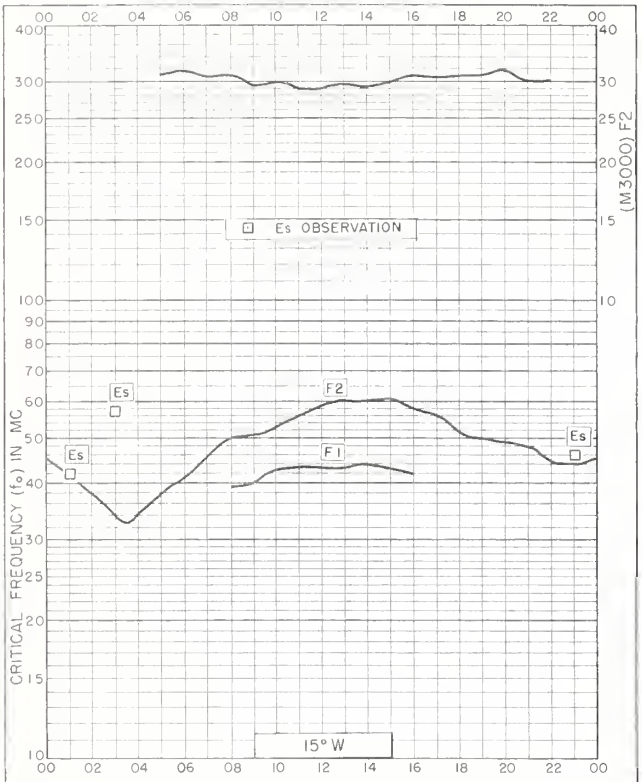


Fig. 25. REYKJAVIK, ICELAND
64.1°N, 21.8°W APRIL 1961

NBS 503



Fig. 26. WHITE SANDS, NEW MEXICO
32.3°N, 106.5°W APRIL 1961

NBS 503

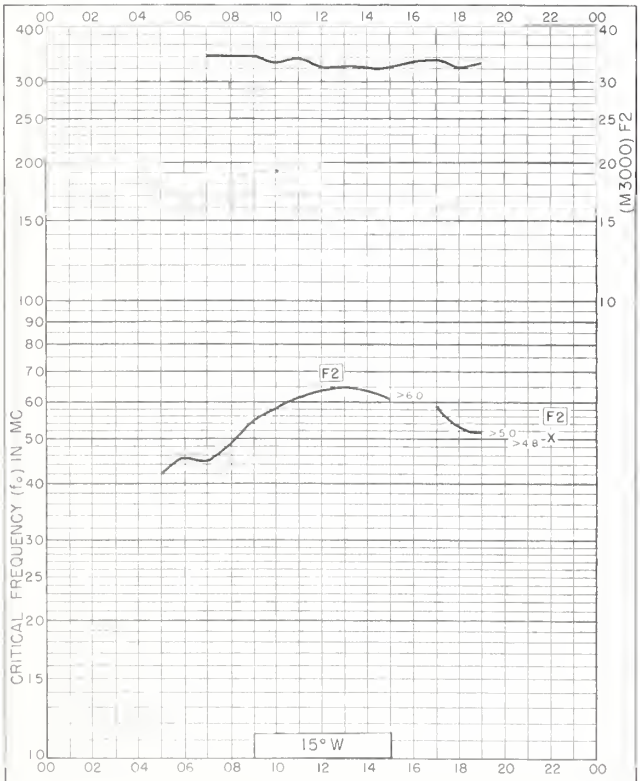


Fig. 27. REYKJAVIK, ICELAND
64.1°N, 21.8°W MARCH 1961

NBS 503

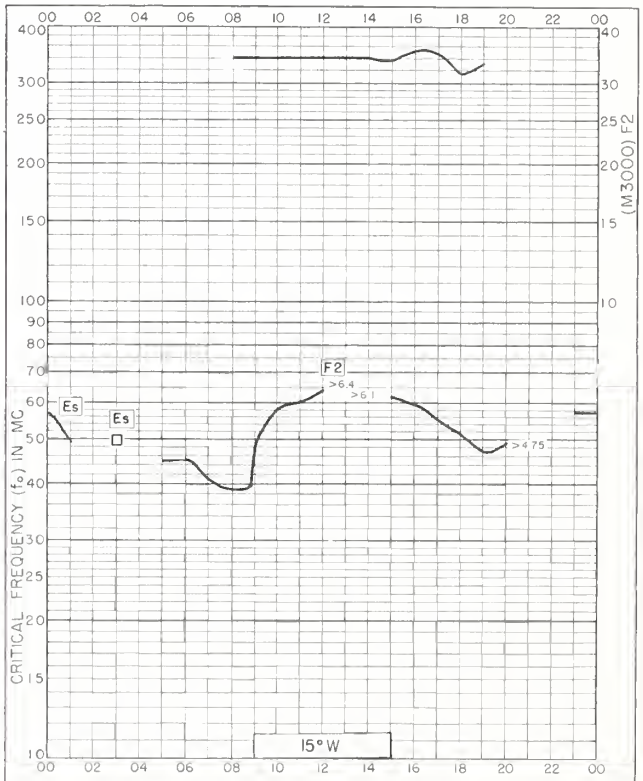


Fig. 28. REYKJAVIK, ICELAND
64.1°N, 21.8°W FEBRUARY 1961

NBS 503

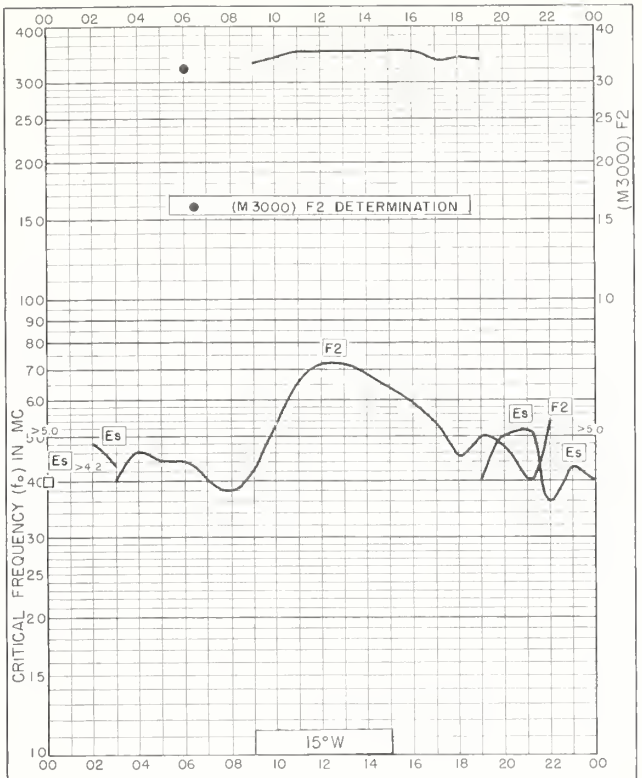


Fig. 29. REYKJAVIK, ICELAND
64.1°N, 21.8°W JANUARY 1961

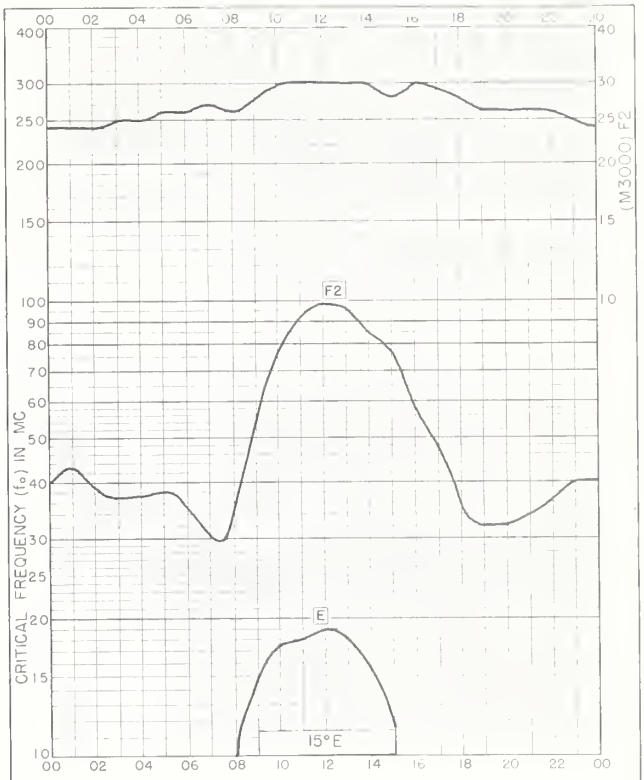


Fig. 30. LYCKSELE, SWEDEN
64.6°N, 18.8°E DECEMBER 1959

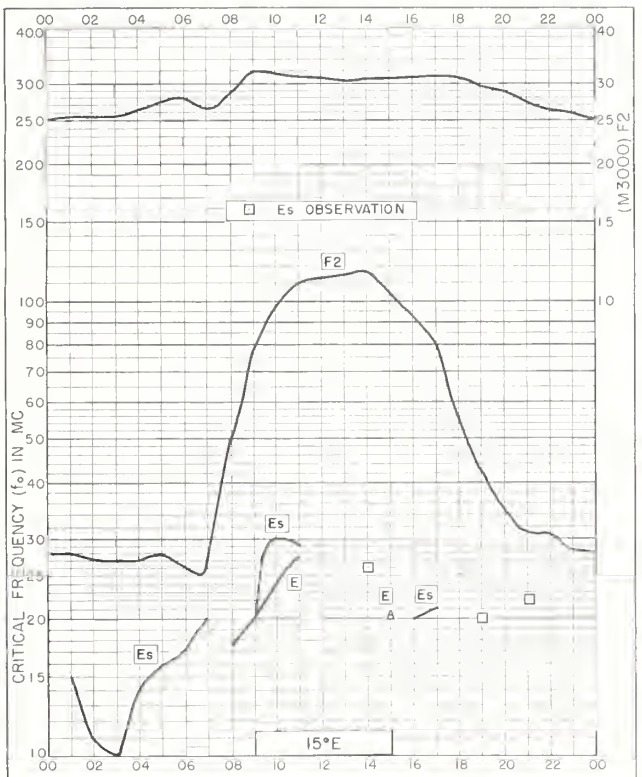


Fig. 31. JULIUSRUH/RUGEN, GERMANY
54.6°N, 13.4°E DECEMBER 1959



Fig. 32. ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W DECEMBER 1959

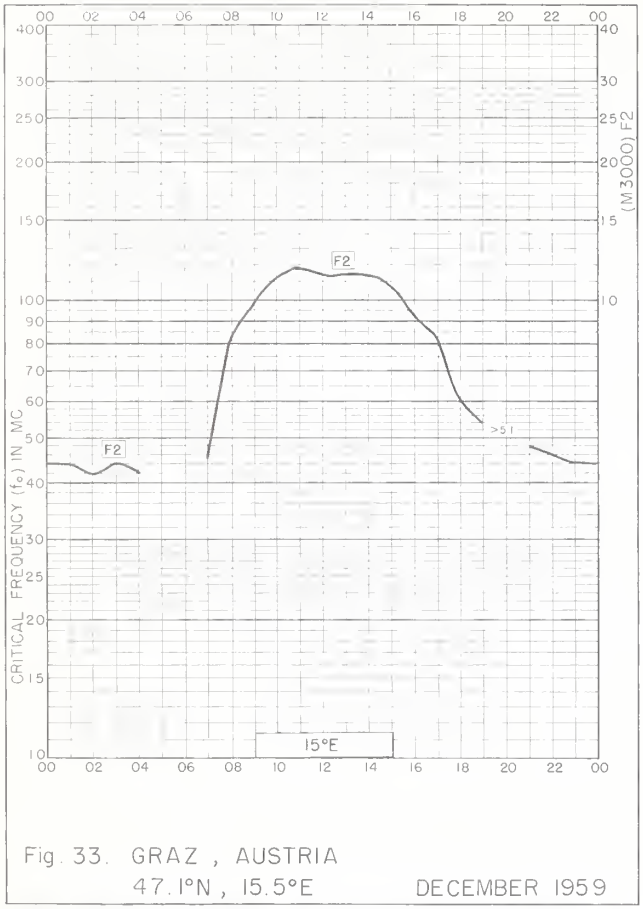


Fig. 33. GRAZ, AUSTRIA
47.1°N, 15.5°E DECEMBER 1959

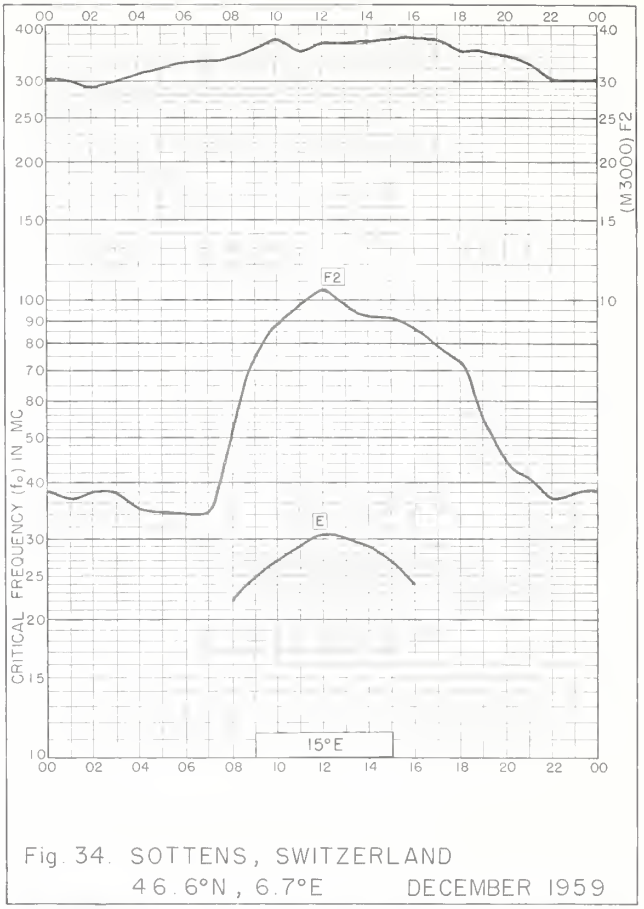


Fig. 34. SOTTENS, SWITZERLAND
46.6°N, 6.7°E DECEMBER 1959

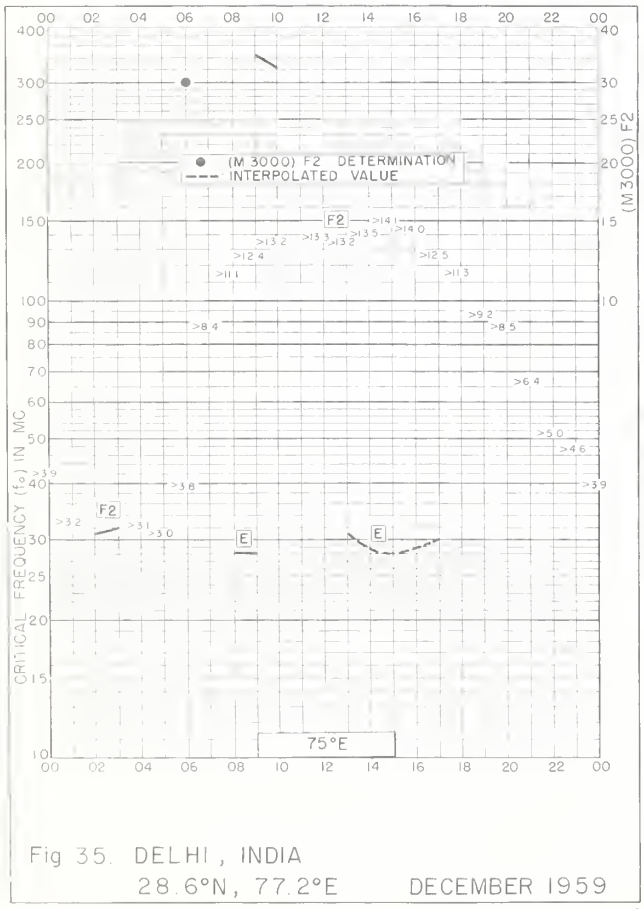


Fig 35. DELHI, INDIA
28.6°N, 77.2°E DECEMBER 1959

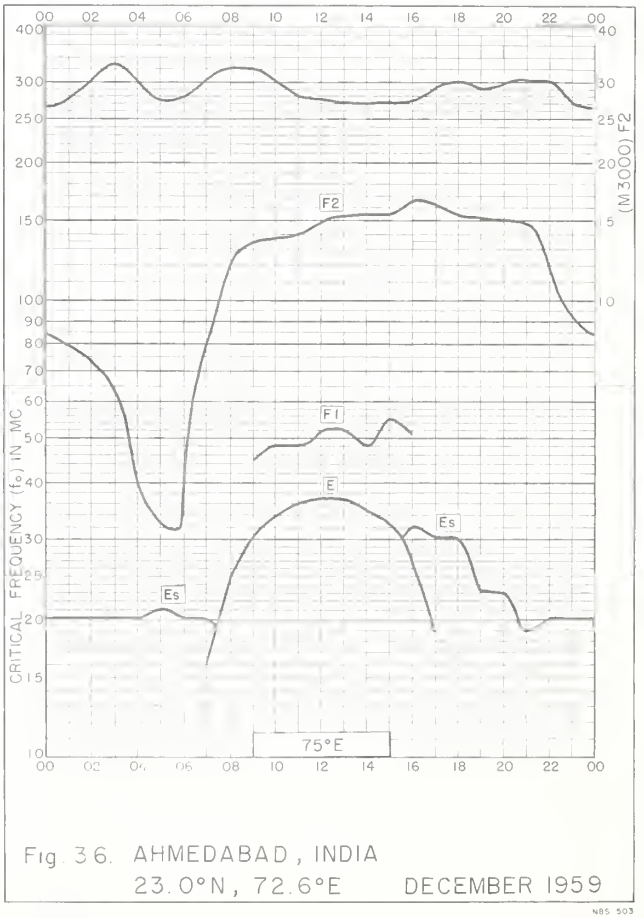


Fig. 36. AHMEDABAD, INDIA
23.0°N, 72.6°E DECEMBER 1959

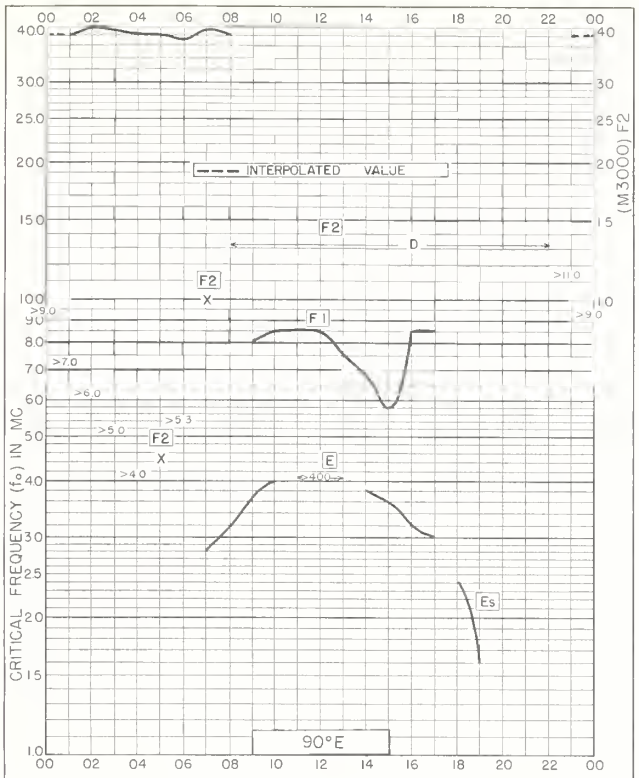


Fig. 37. CALCUTTA, INDIA
23.0°N, 88.6°E DECEMBER 1959

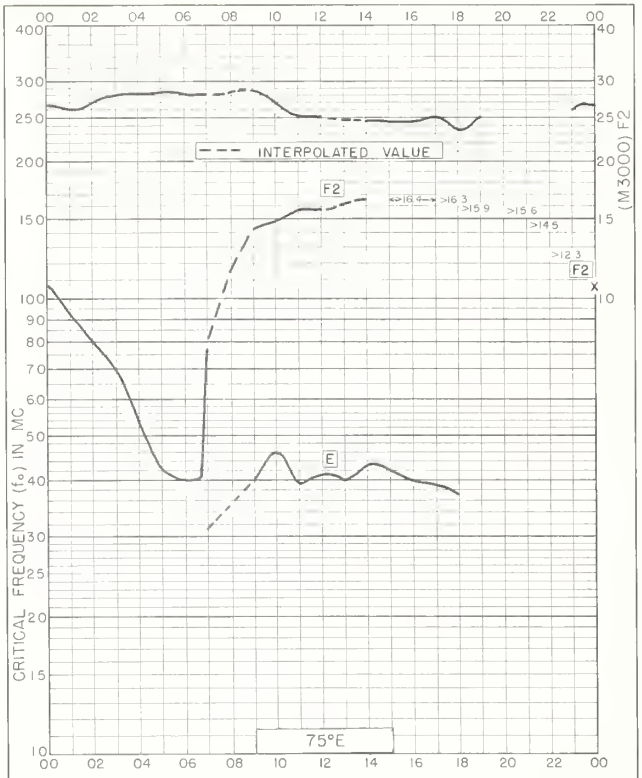


Fig. 38. BOMBAY, INDIA
19.0°N, 72.8°E DECEMBER 1959

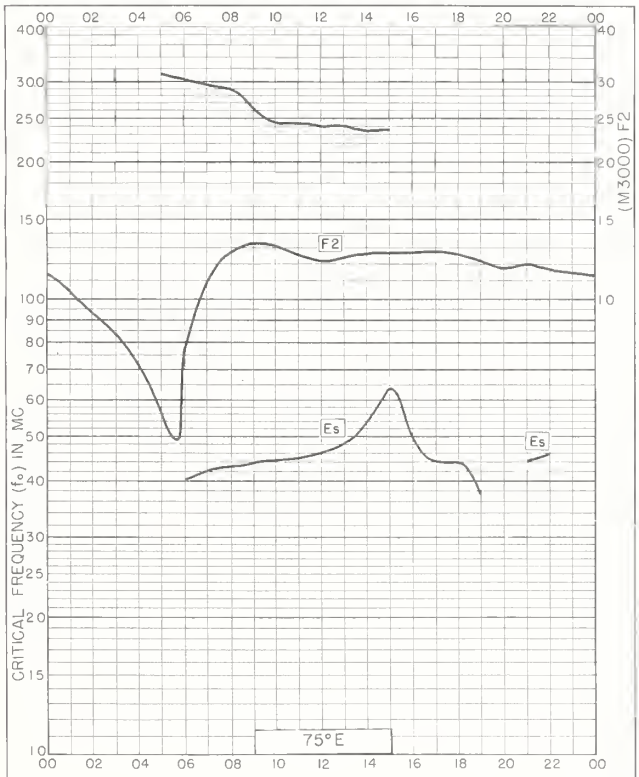


Fig. 39. MADRAS, INDIA
13.1°N, 80.3°E DECEMBER 1959

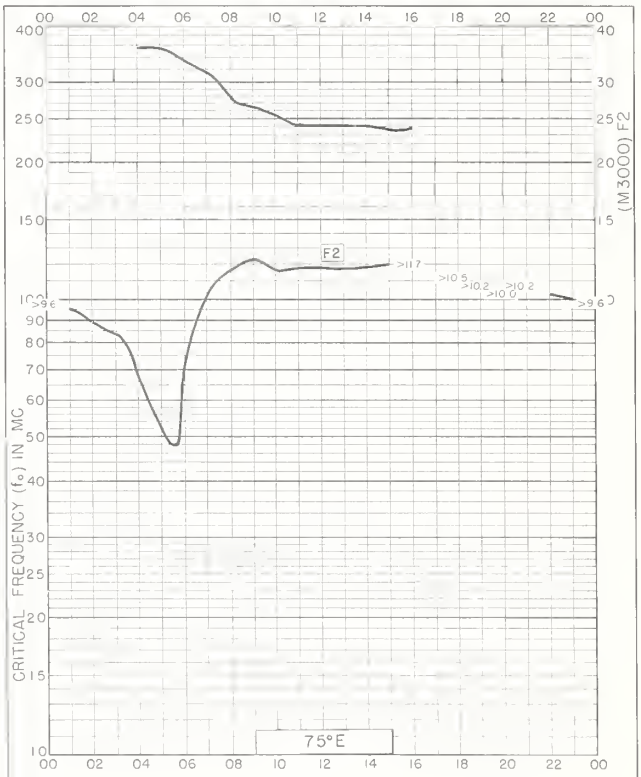


Fig. 40. TIRUCHY, INDIA
10.8°N, 78.7°E DECEMBER 1959

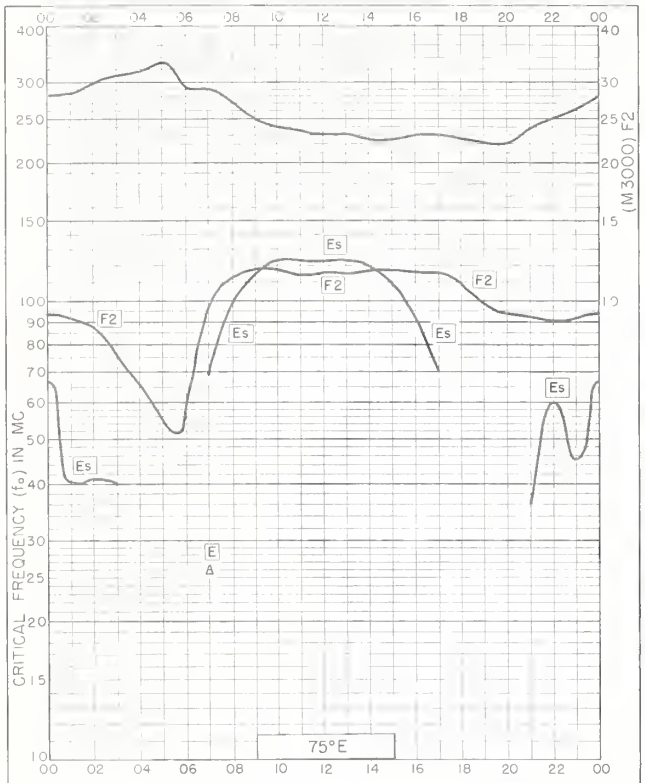


Fig. 41. KODAIKANAL, INDIA
10.2°N, 77.5°E DECEMBER 1959

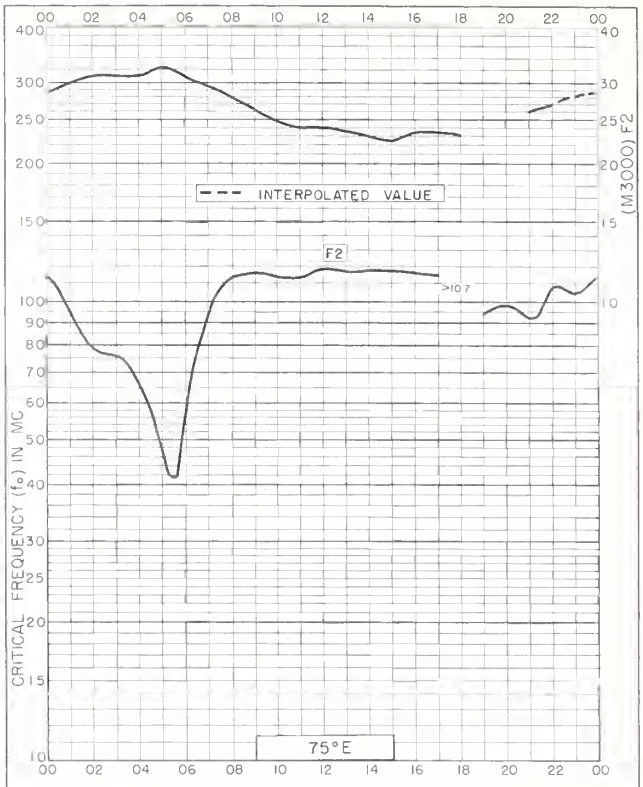


Fig. 42. TRIVANDRUM, INDIA
8.5°N, 77.0°E DECEMBER 1959

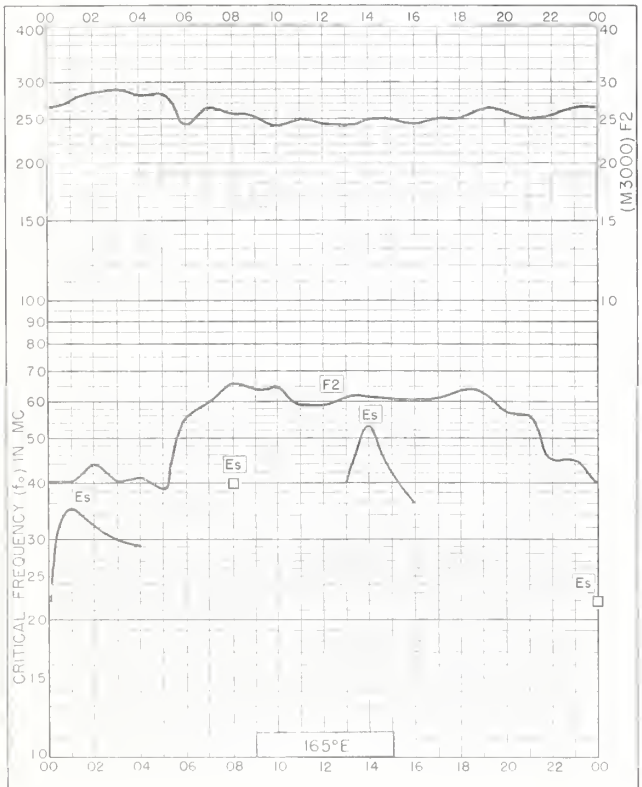


Fig. 43 CAPE HALLETT
72.3°S, 170.2°E DECEMBER 1959

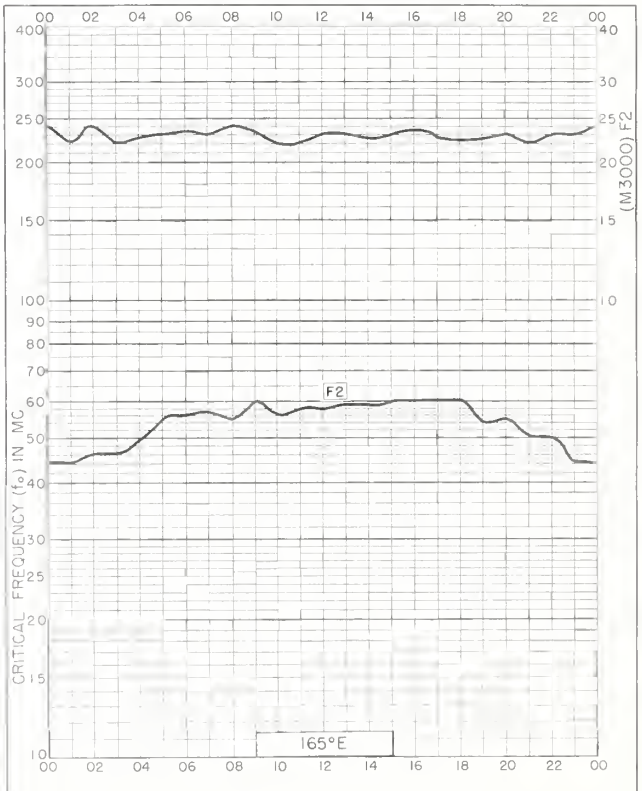


Fig. 44. SCOTT BASE
77.9°S, 166.8°E DECEMBER 1959

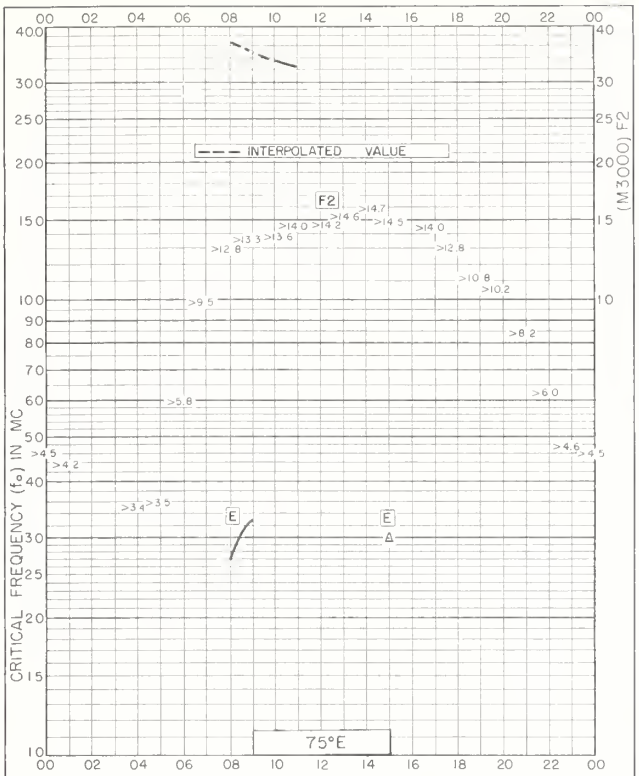


Fig. 45. DELHI, INDIA
28.6°N, 77.2°E NOVEMBER 1959

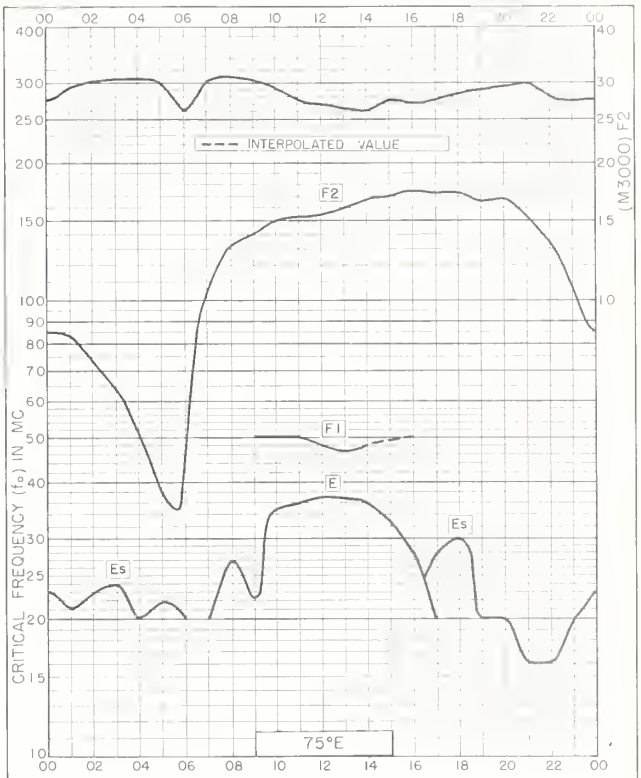


Fig. 46. AHMEDABAD, INDIA
23.0°N, 72.6°E NOVEMBER 1959

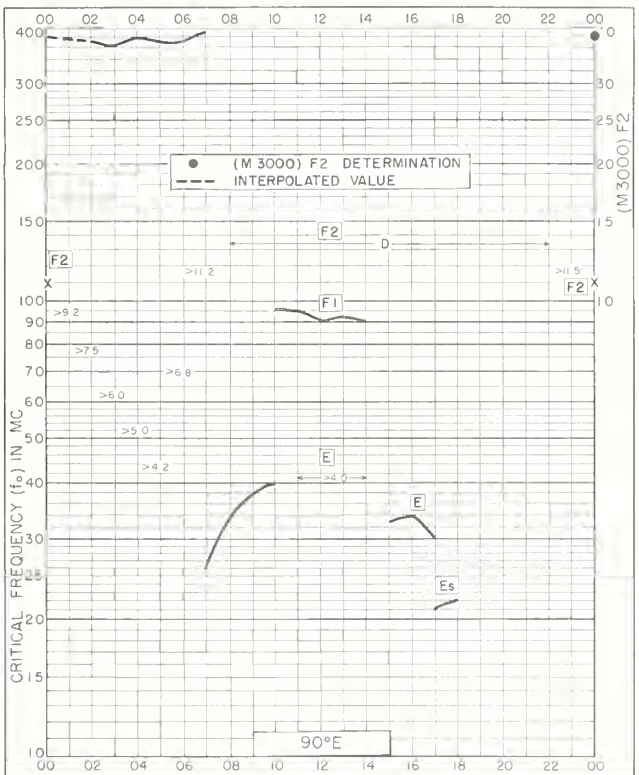


Fig. 47. CALCUTTA, INDIA
23.0°N, 88.6°E NOVEMBER 1959

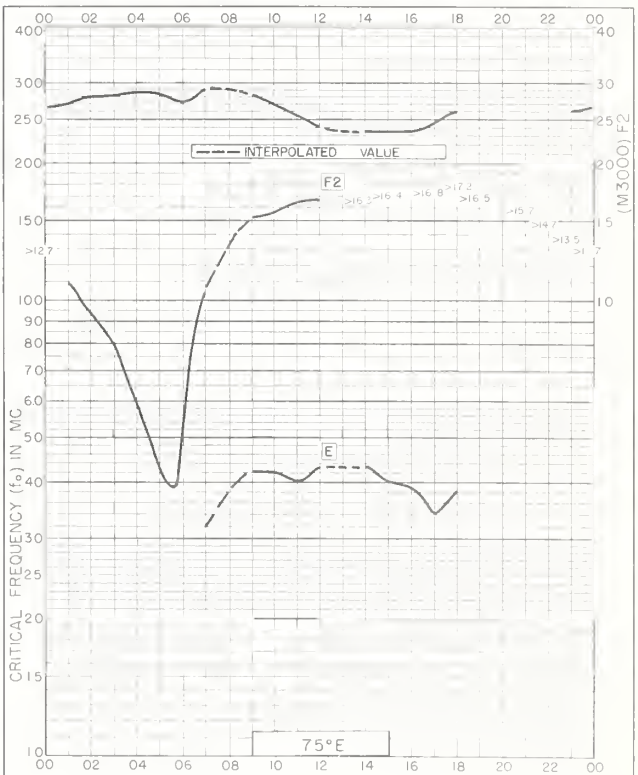


Fig. 48. BOMBAY, INDIA
19.0°N, 72.8°E NOVEMBER 1959

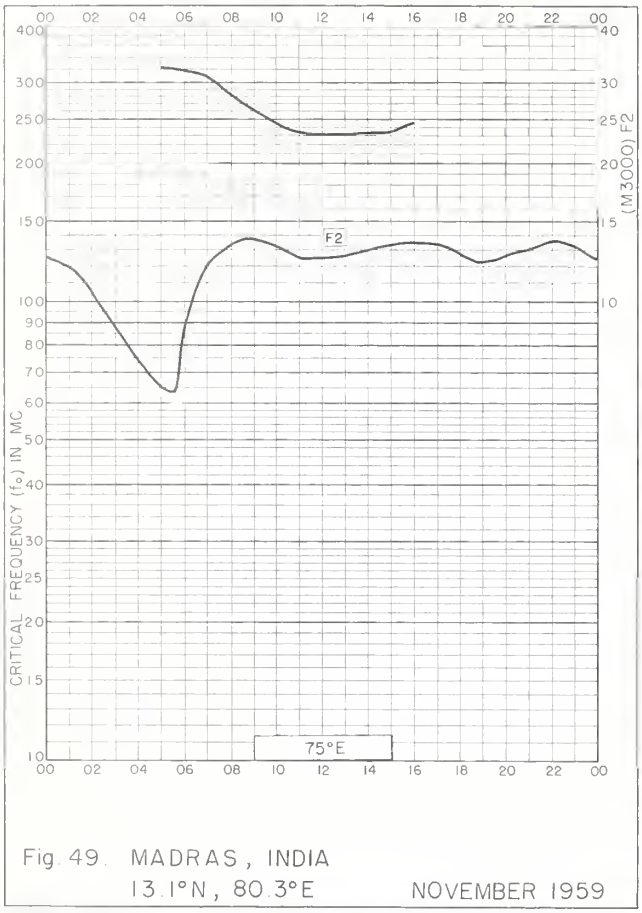


Fig. 49. MADRAS, INDIA
13.1°N, 80.3°E NOVEMBER 1959

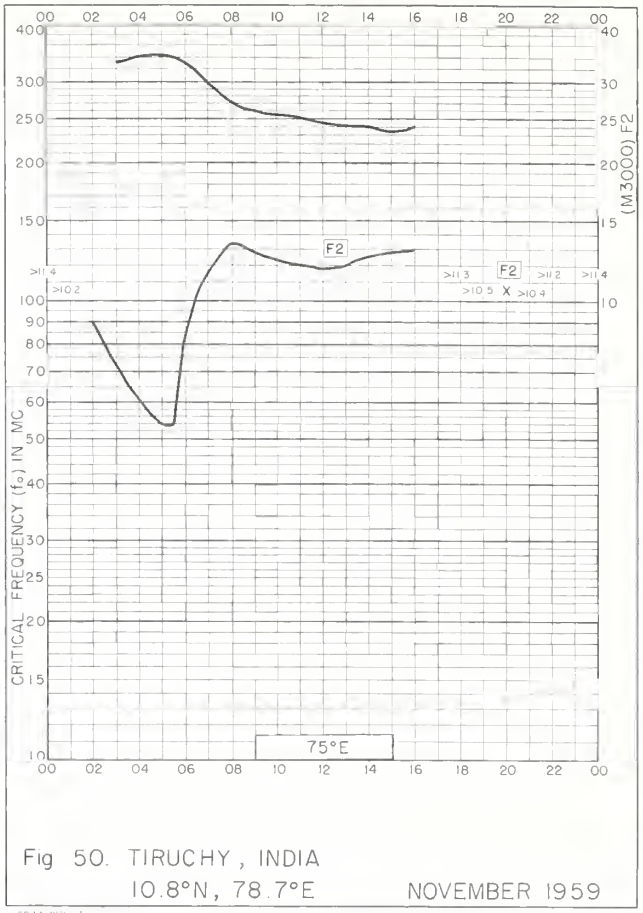


Fig 50. TIRUCHY, INDIA
10.8°N, 78.7°E NOVEMBER 1959

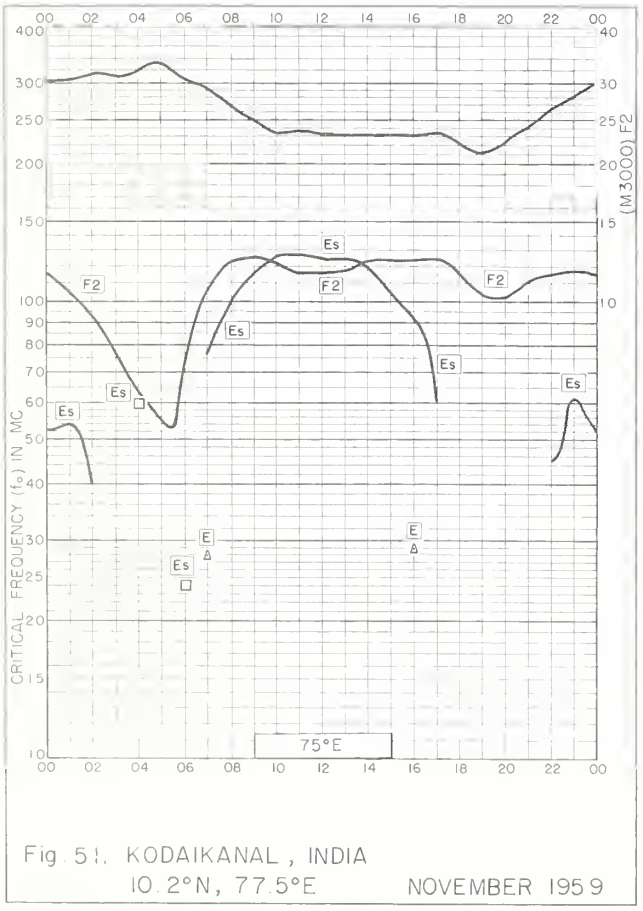


Fig. 51. KODAIKANAL, INDIA
10.2°N, 77.5°E NOVEMBER 1959

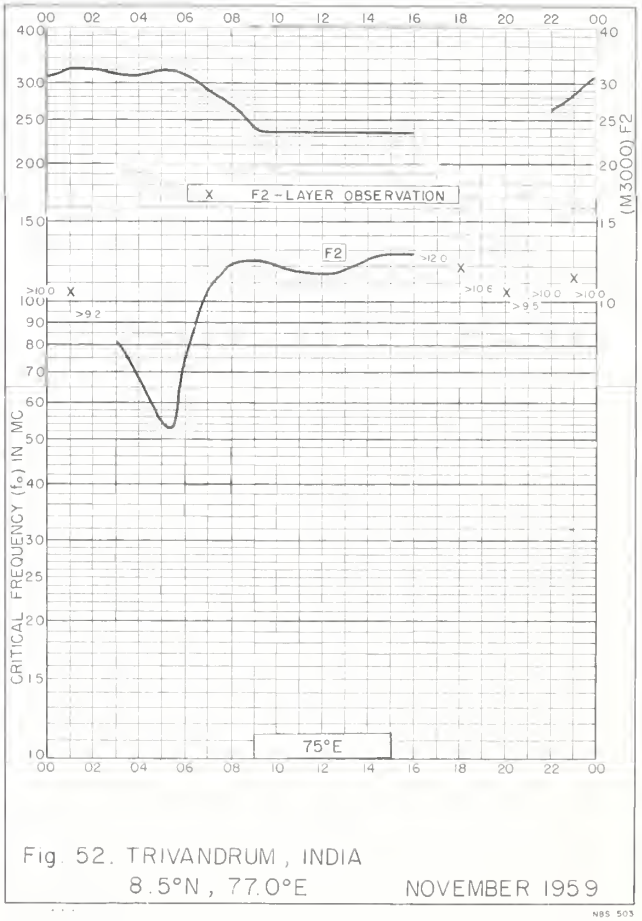


Fig. 52. TRIVANDRUM, INDIA
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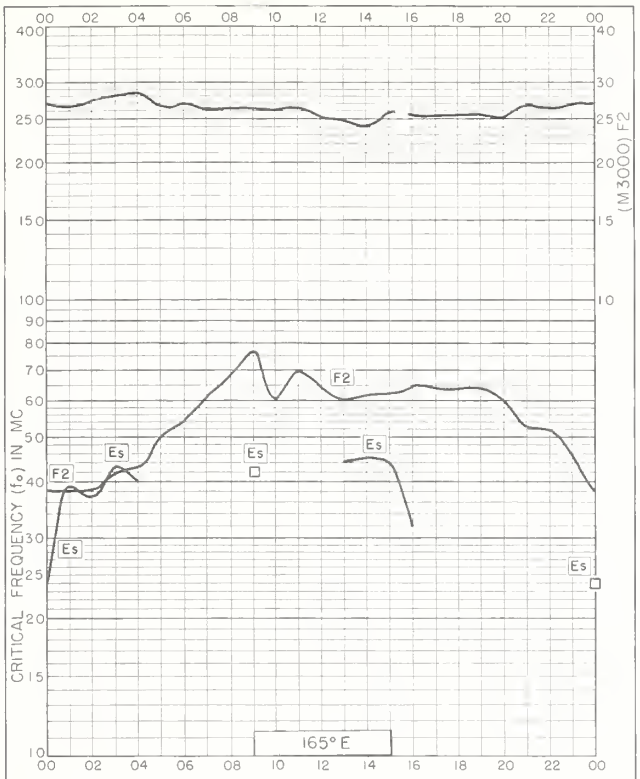


Fig. 53. CAPE HALLETT
72.3°S, 170.2°E NOVEMBER 1959

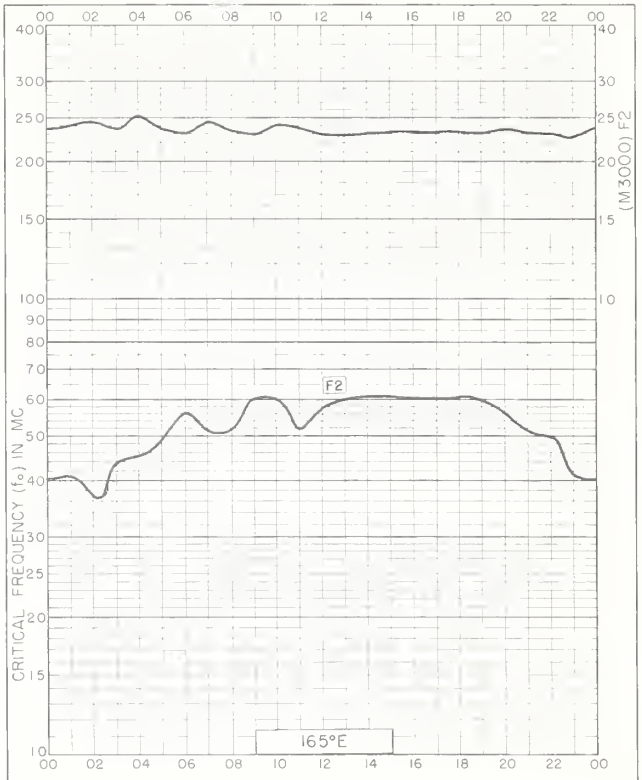


Fig. 54. SCOTT BASE
77.9°S, 166.8°E NOVEMBER 1959

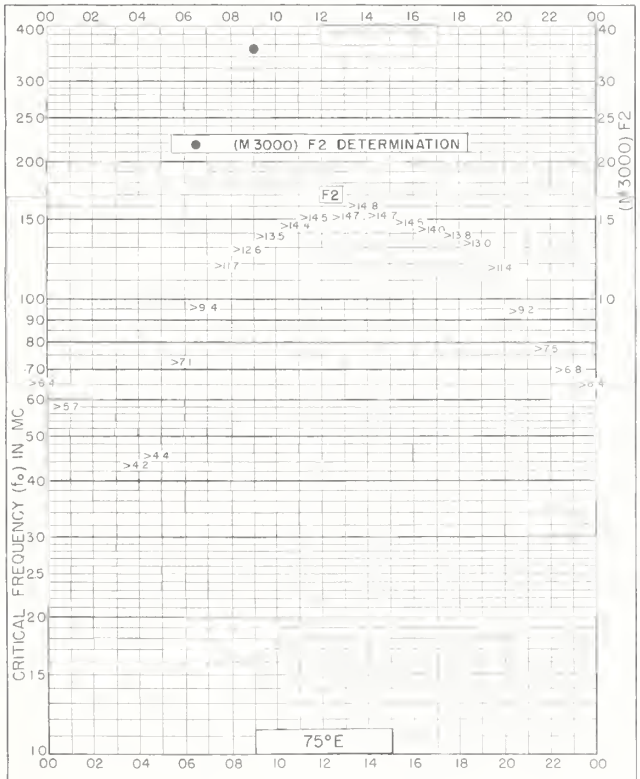


Fig. 55. DELHI, INDIA
28.6°N, 77.2°E OCTOBER 1959

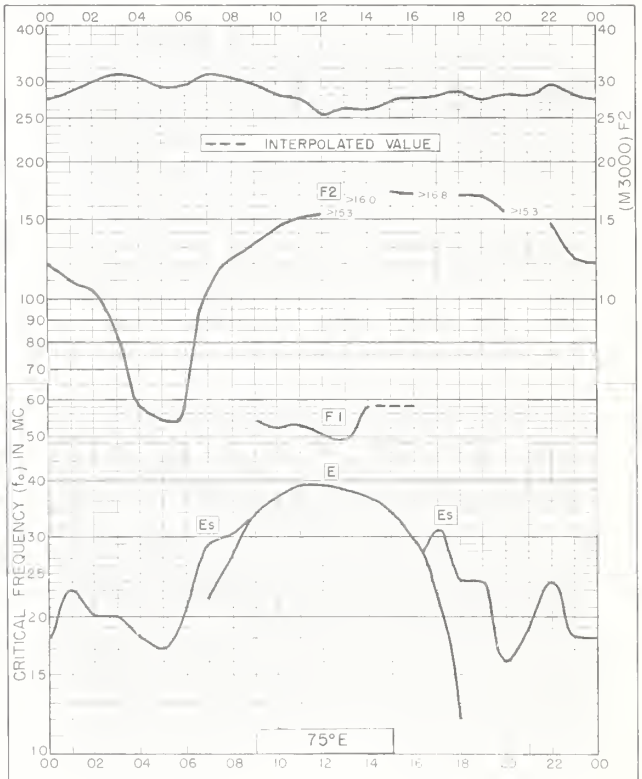


Fig. 56. AHMEDABAD, INDIA
23.0°N, 72.6°E OCTOBER 1959

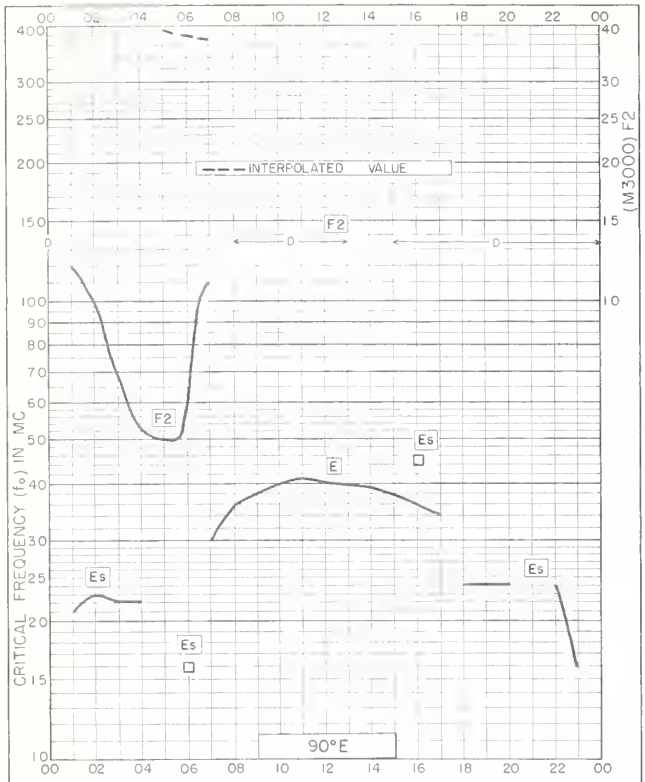


Fig. 57. CALCUTTA, INDIA
23.0°N, 88.6°E OCTOBER 1959

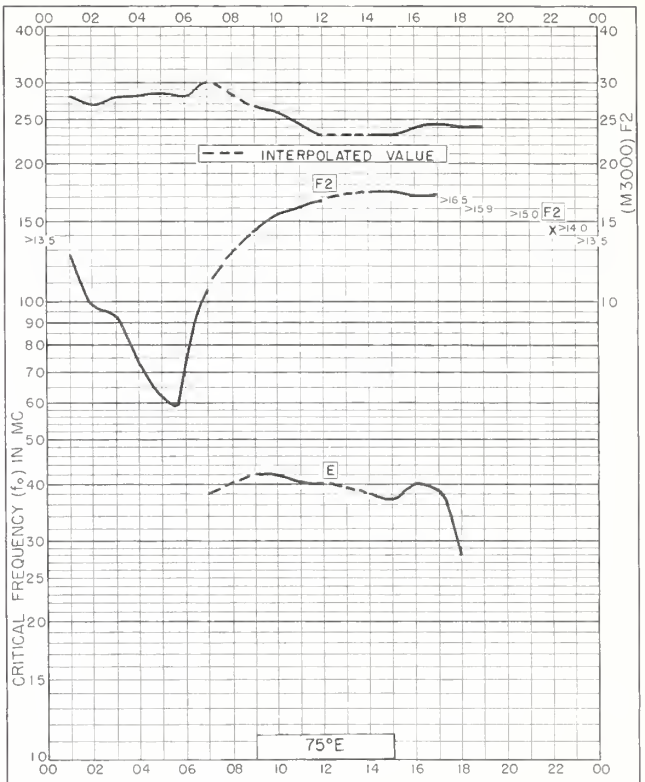


Fig. 58. BOMBAY, INDIA
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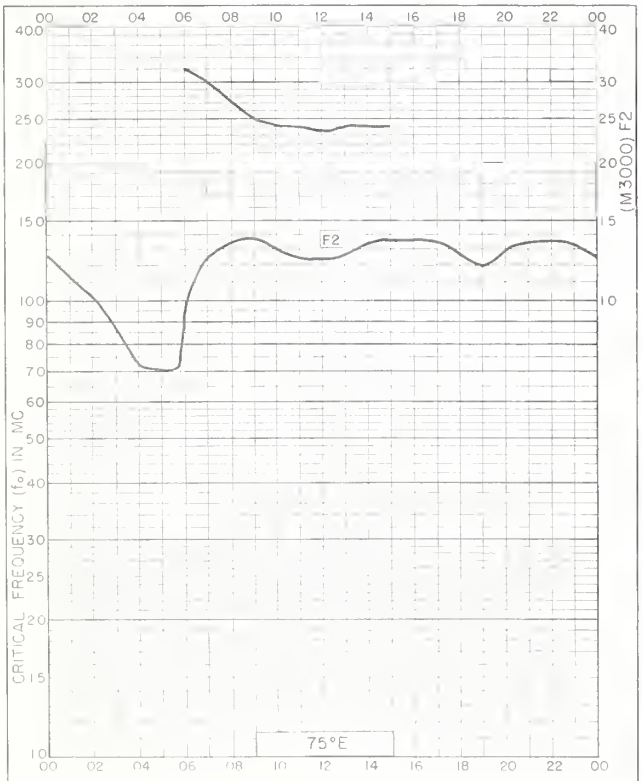


Fig 59. MADRAS, INDIA
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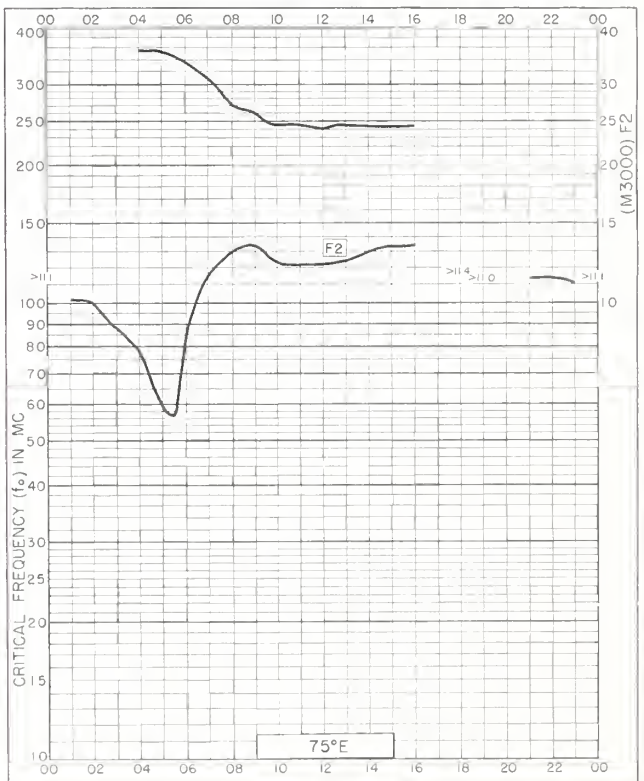


Fig 60. TIRUCHY, INDIA
10.8°N, 78.7°E OCTOBER 1959



Fig. 61. KODAIKANAL, INDIA
10.2°N, 77.5°E OCTOBER 1959

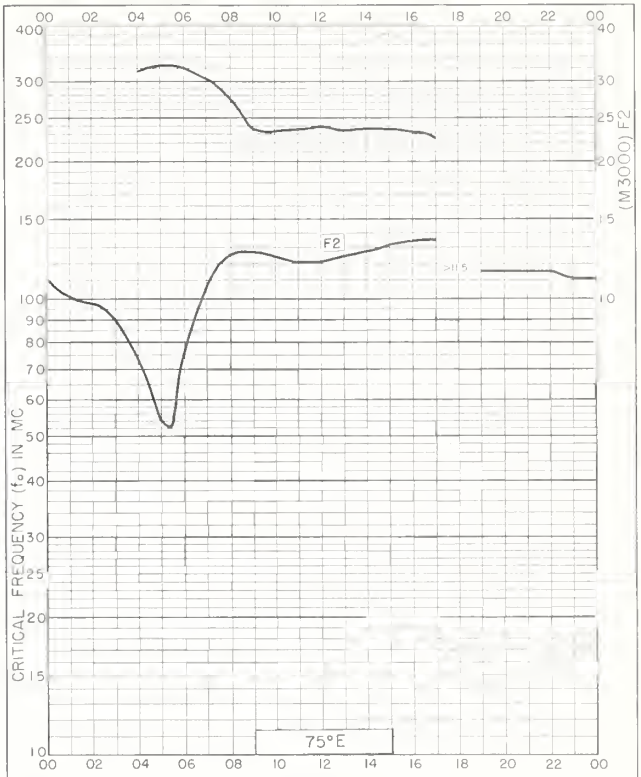


Fig. 62. TRIVANDRUM, INDIA
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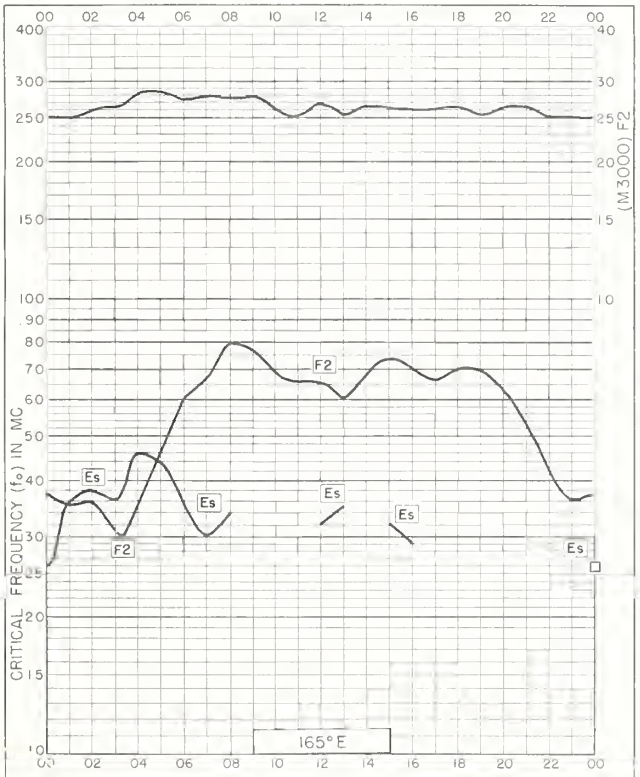


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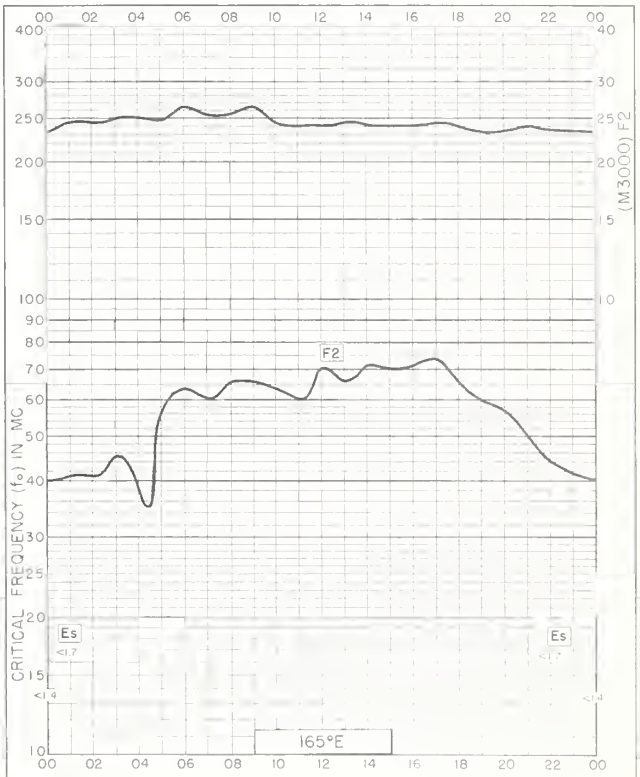


Fig. 64. SCOTT BASE
77.9°S, 166.8°E OCTOBER 1959

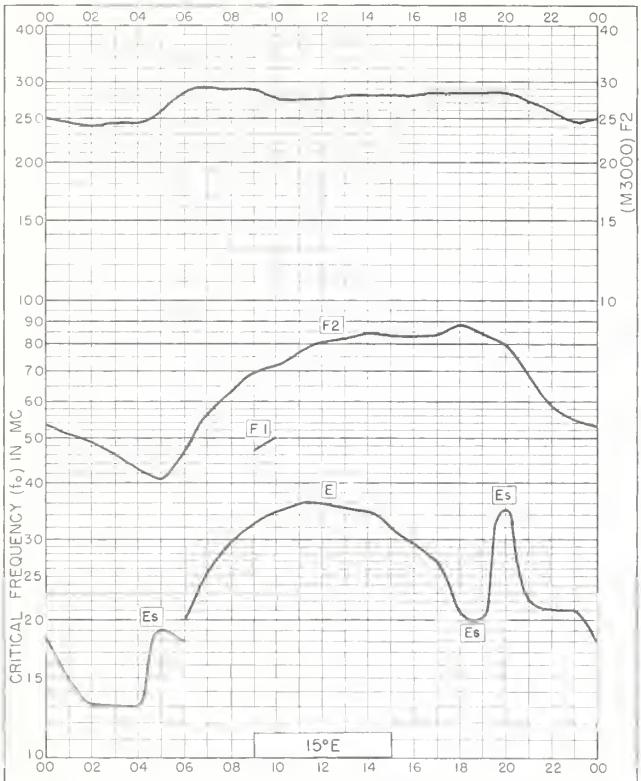


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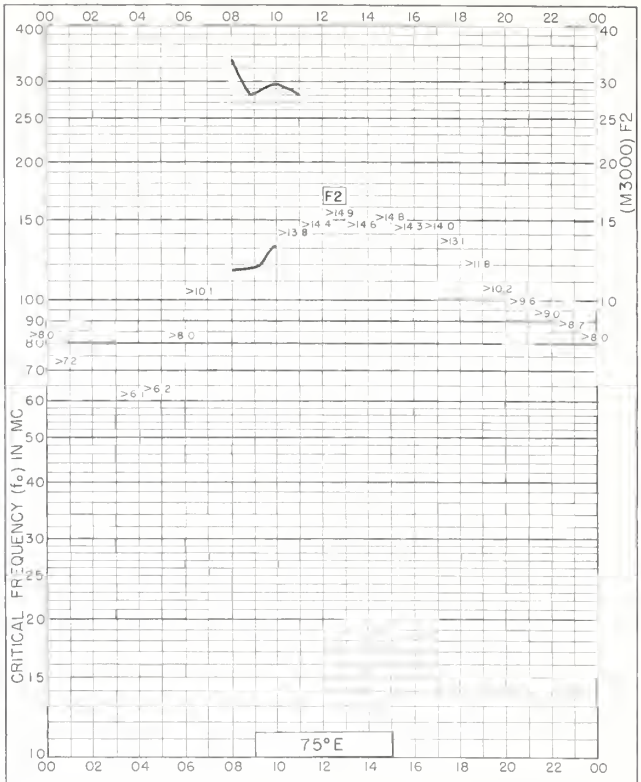


Fig. 66. DELHI, INDIA
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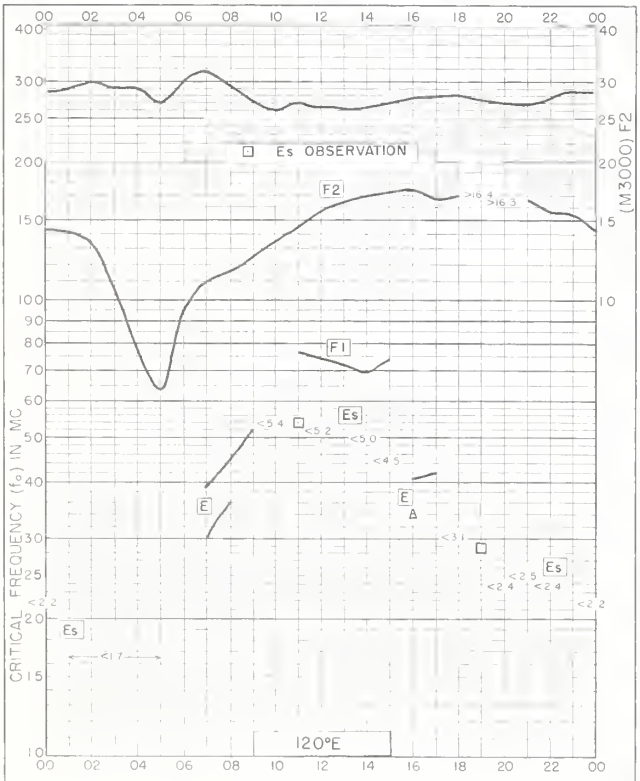


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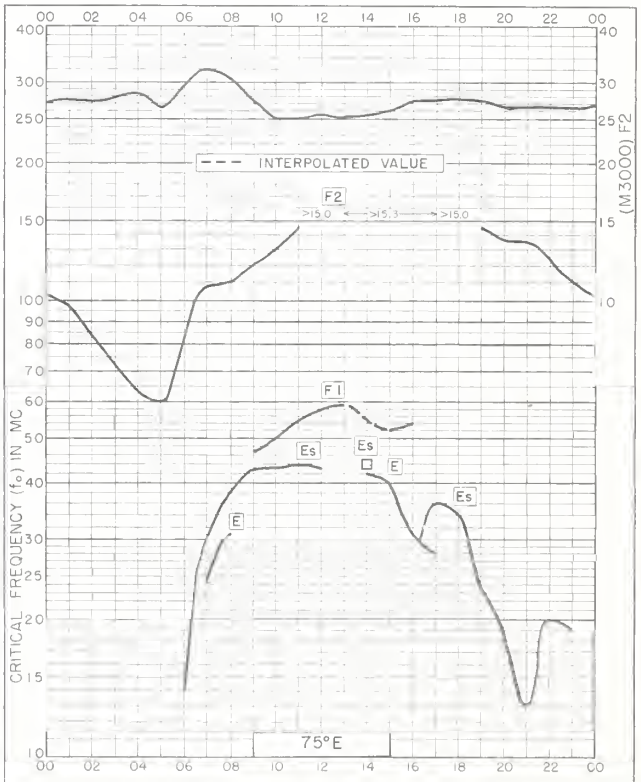


Fig. 68. AHMEDABAD, INDIA
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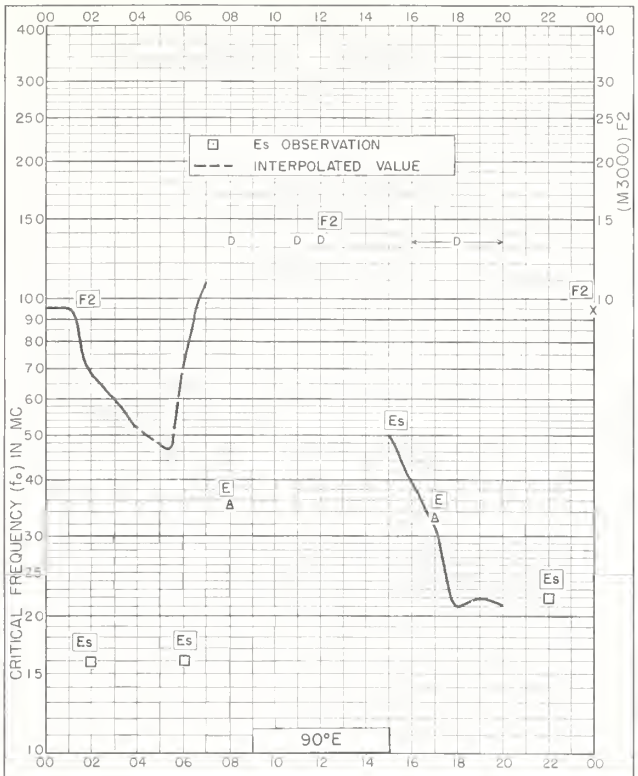


Fig. 69. CALCUTTA, INDIA
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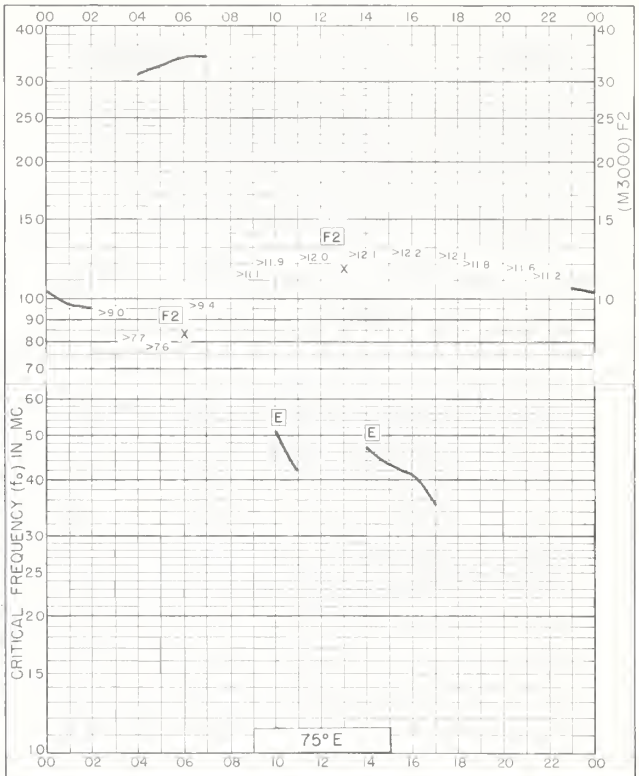


Fig. 70. BOMBAY, INDIA
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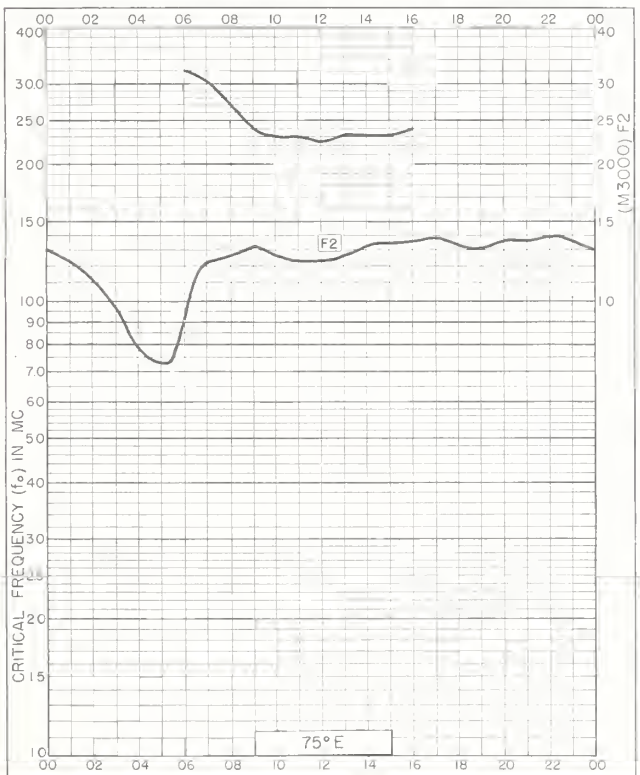


Fig. 71. MADRAS, INDIA
13.1°N, 80.3°E SEPTEMBER 1959

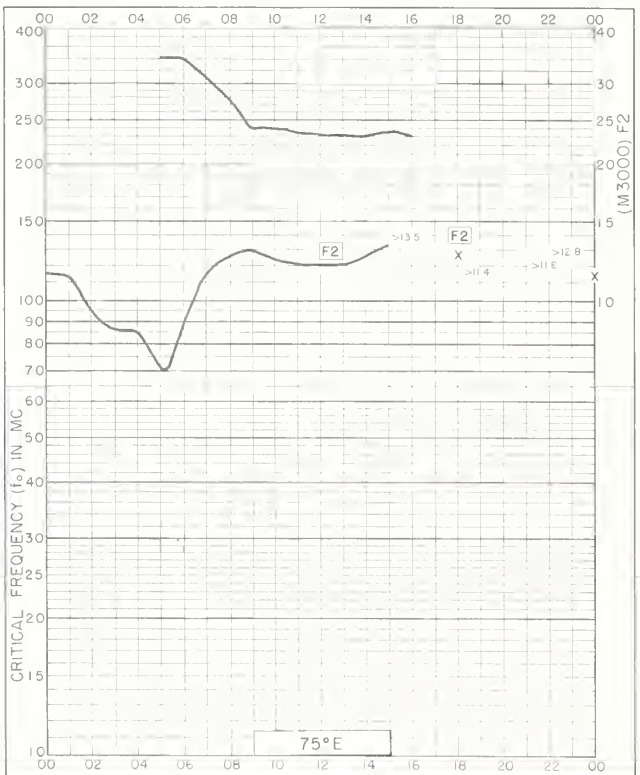


Fig. 72. TIRUCHY, INDIA
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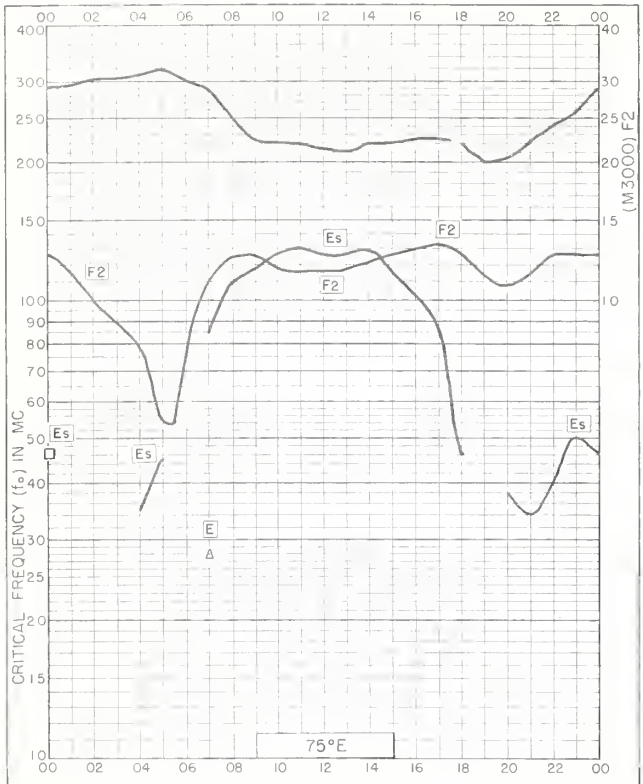


Fig. 73. KODAIKANAL, INDIA
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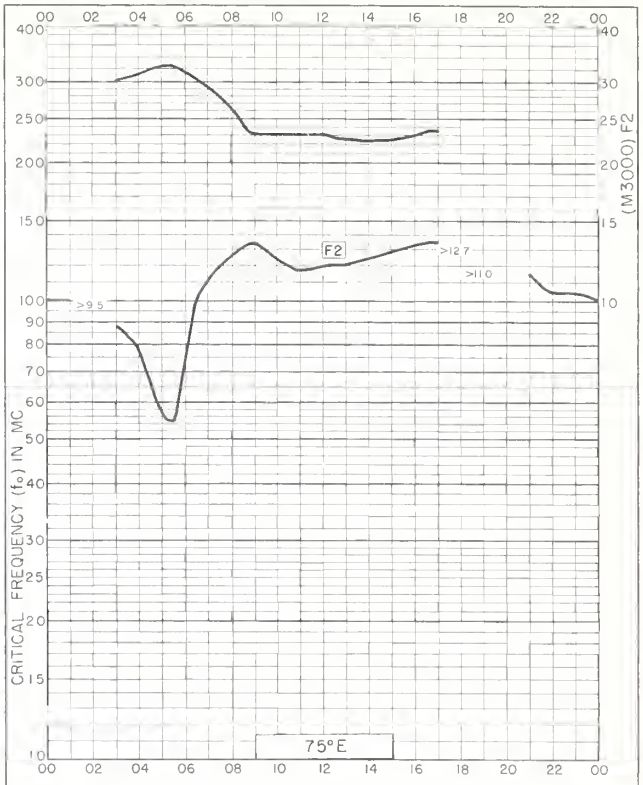


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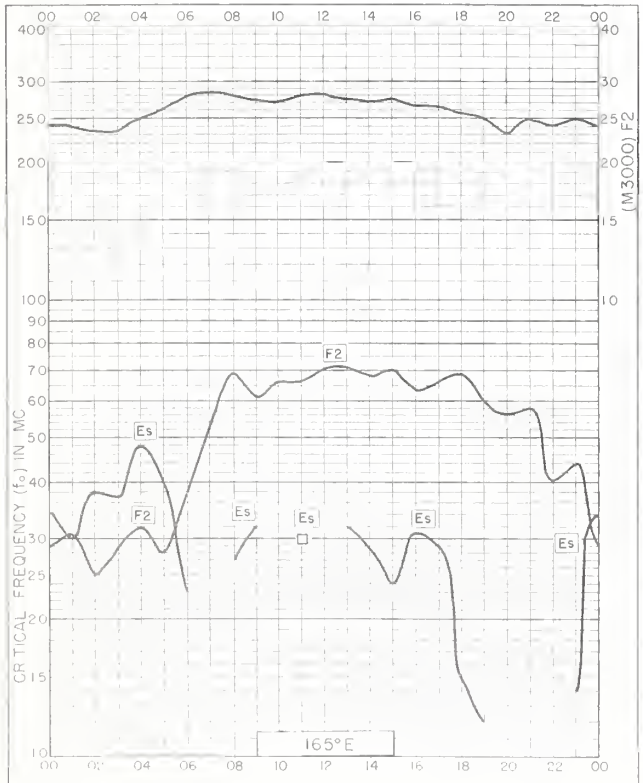


Fig. 75. CAPE HALLETT
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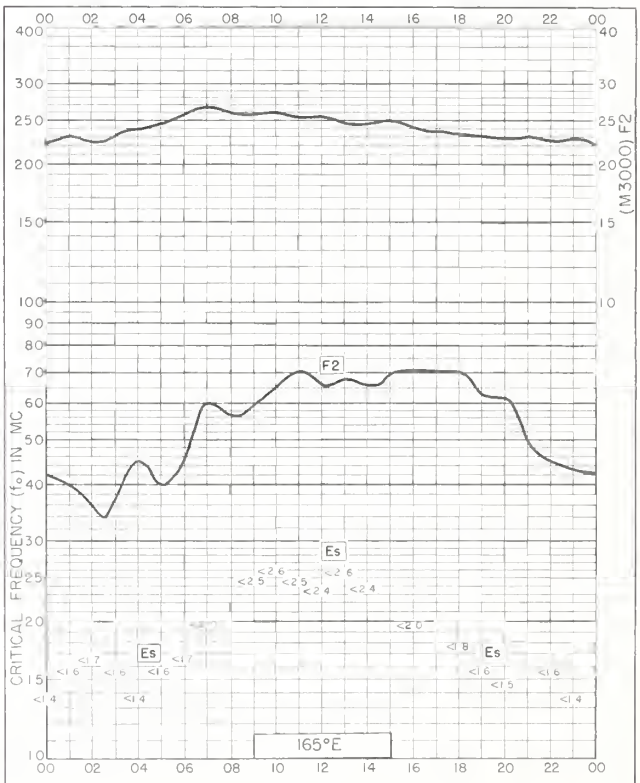


Fig. 76. SCOTT BASE
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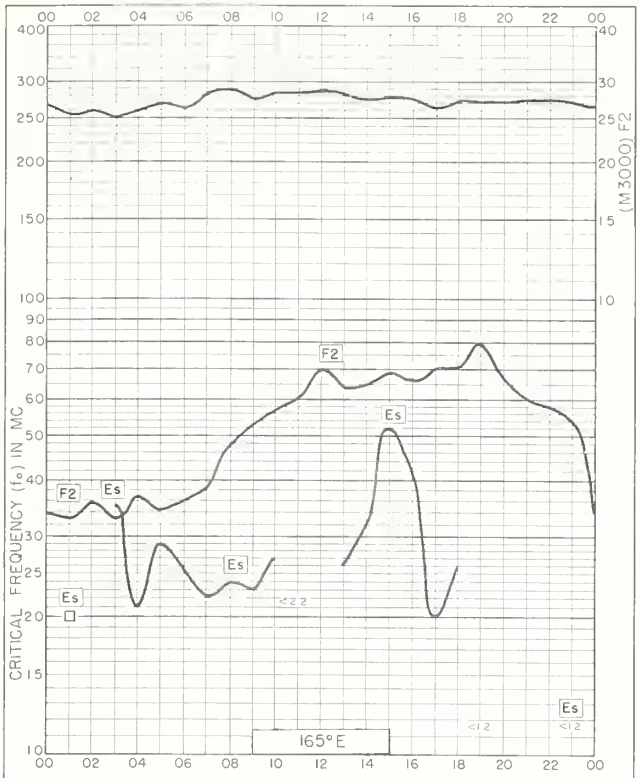


Fig. 77. CAPE HALLETT
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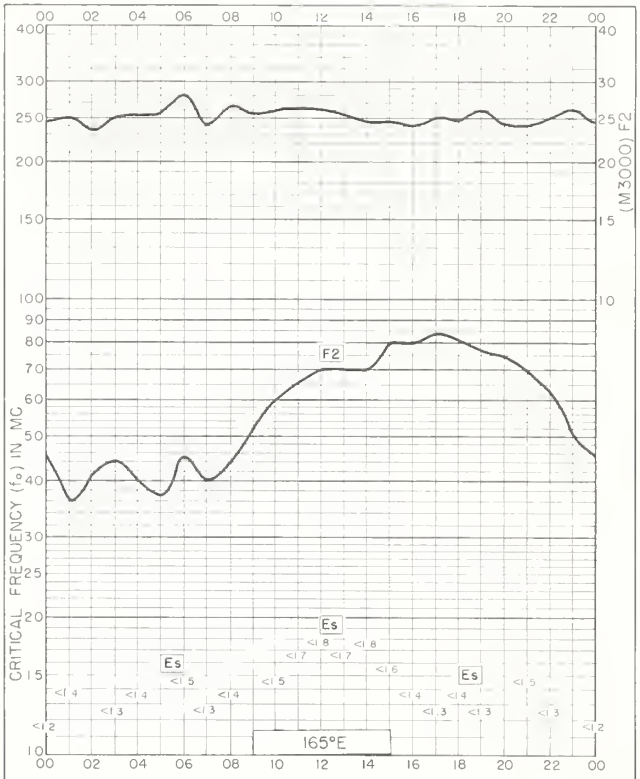


Fig. 78. SCOTT BASE
77.9°S, 166.8°E AUGUST 1959

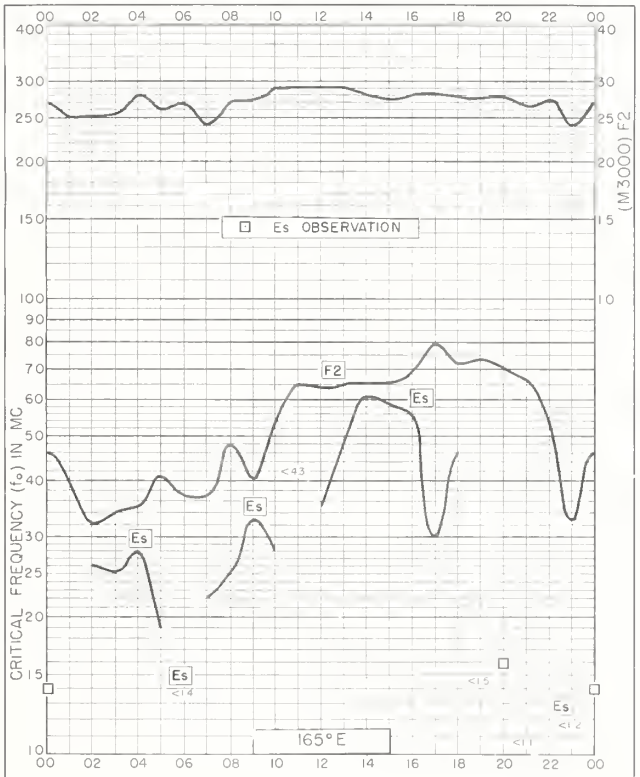


Fig. 79. CAPE HALLETT
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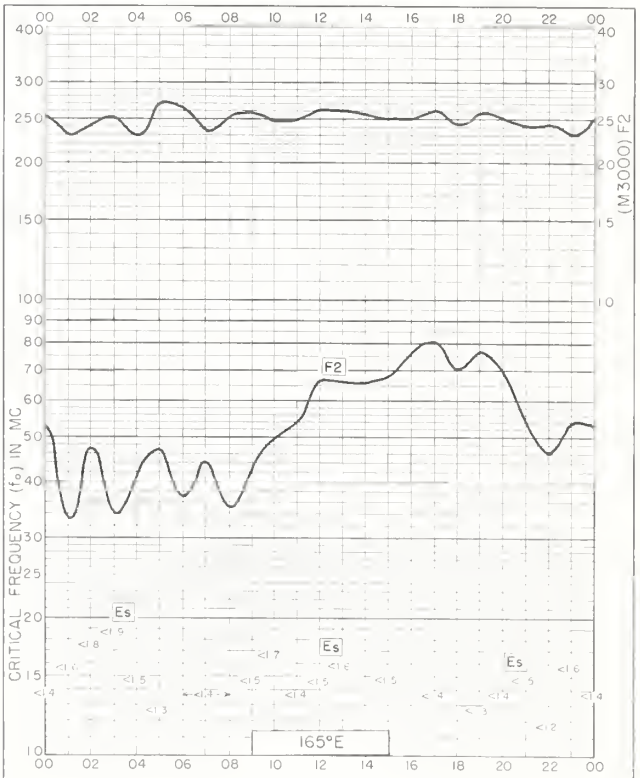


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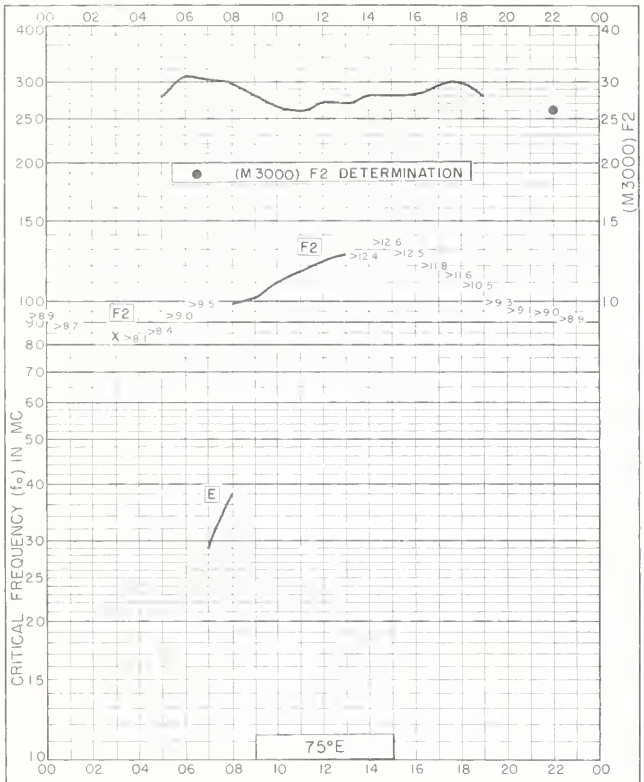


Fig. 81. DELHI, INDIA
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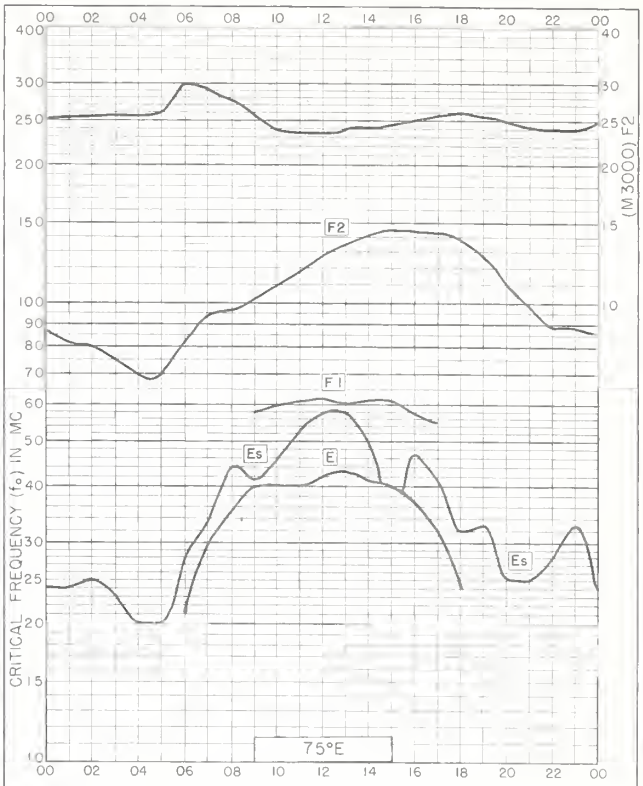


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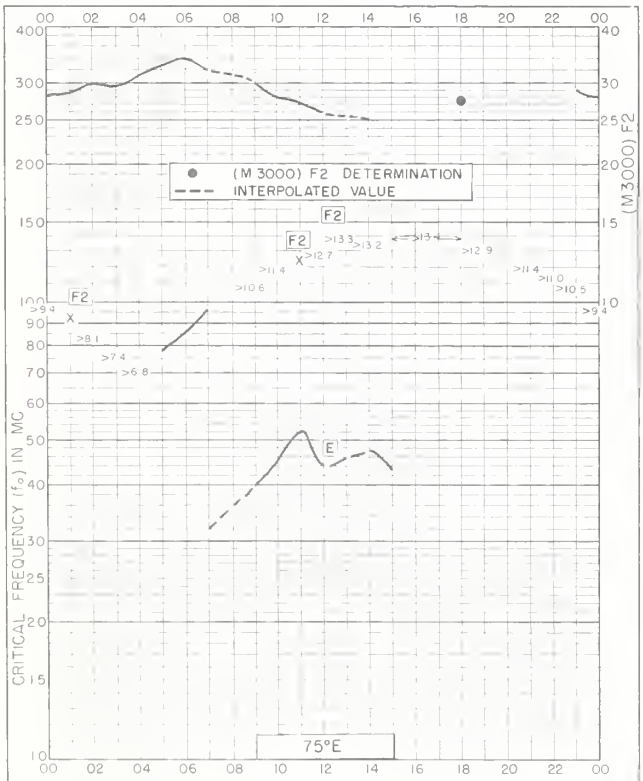


Fig. 83. BOMBAY, INDIA
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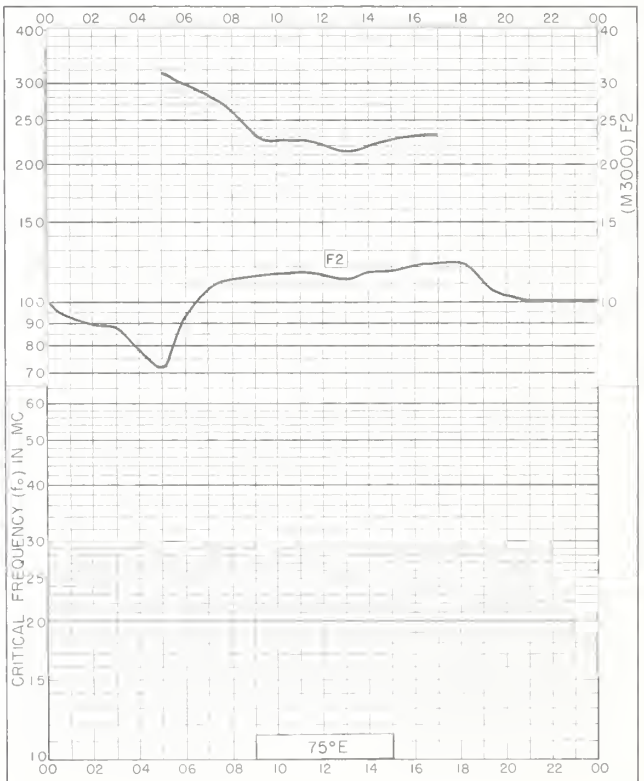


Fig. 84. MADRAS, INDIA
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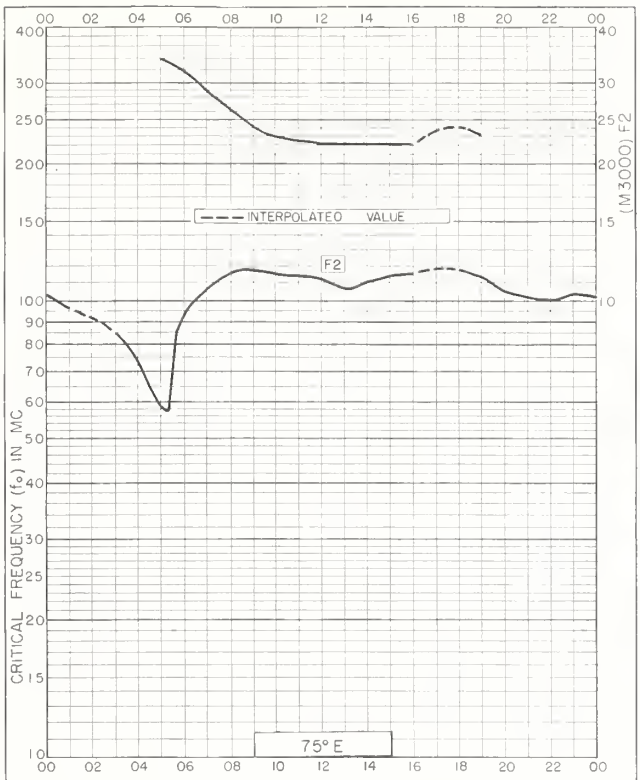


Fig. 85. TIRUCHY, INDIA
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Fig. 86. KODAIKANAL, INDIA
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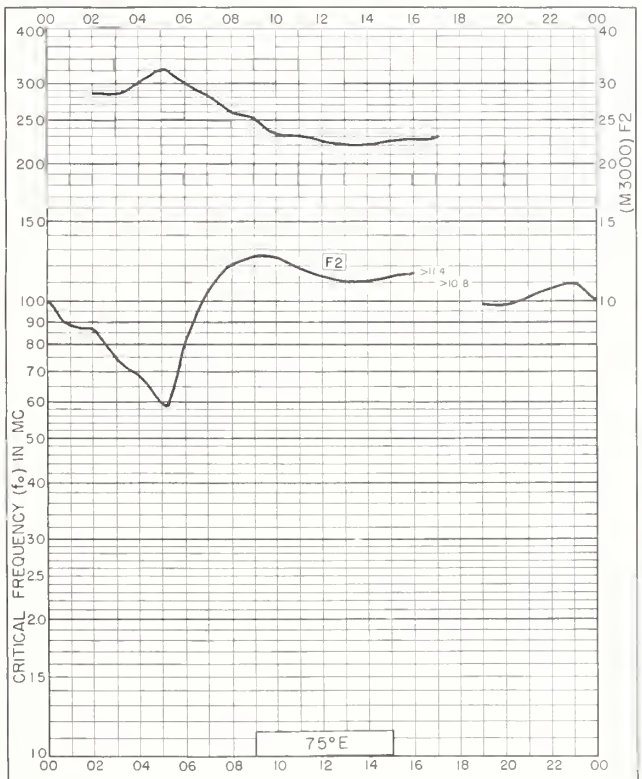


Fig. 87. TRIVANDRUM, INDIA
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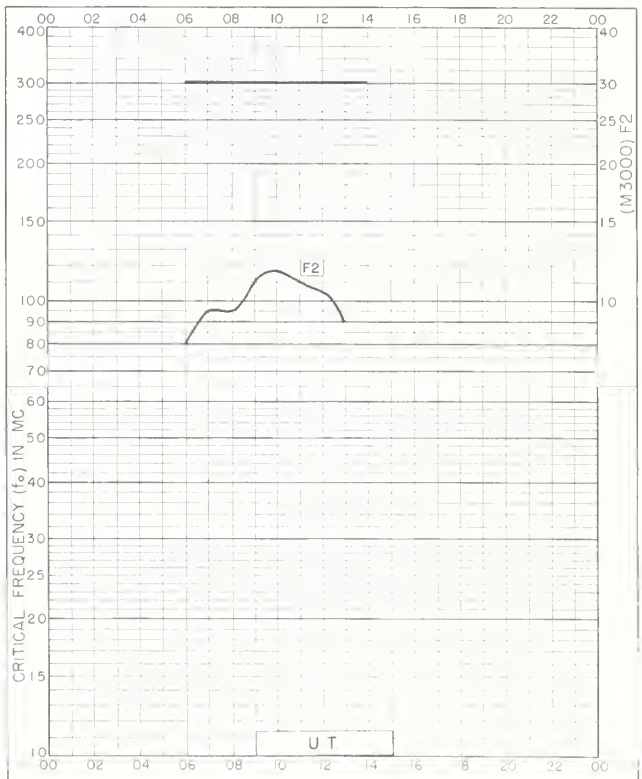


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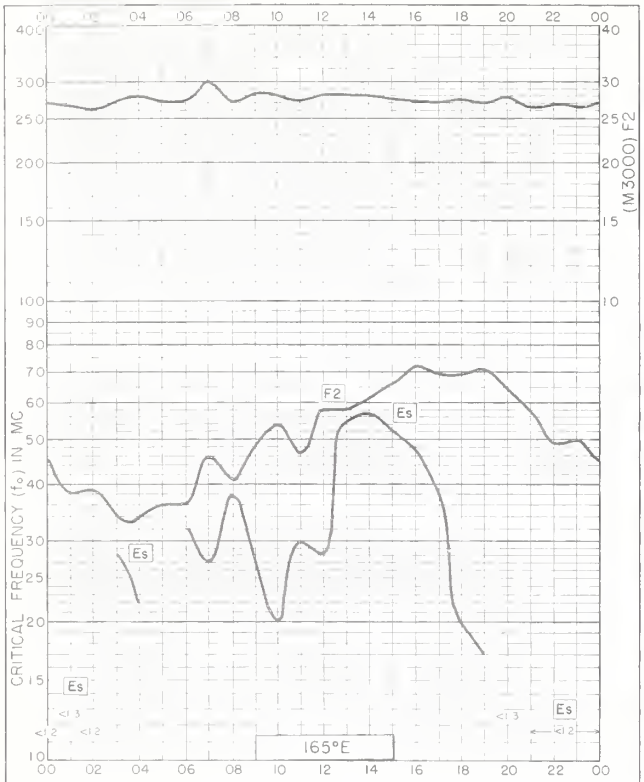


Fig. 89. CAPE HALLETT
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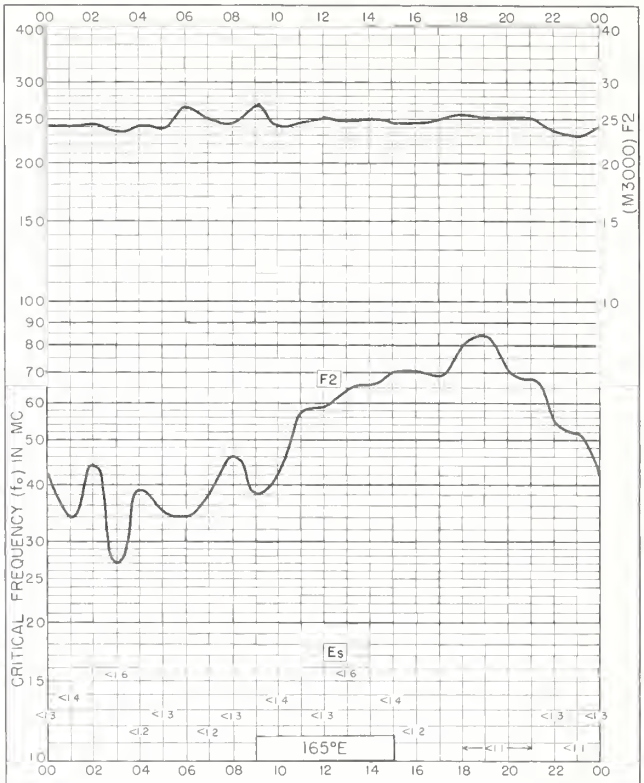


Fig. 90. SCOTT BASE
77.9°S, 166.8°E JUNE 1959

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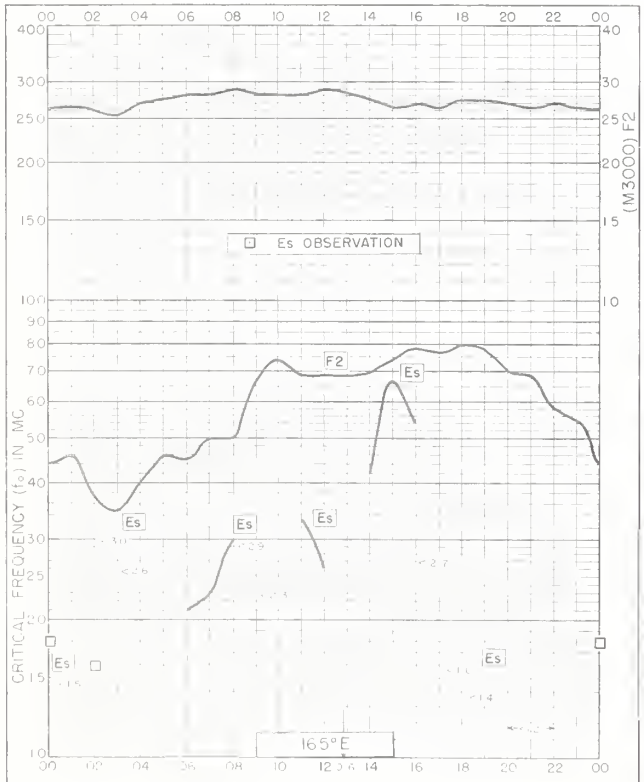


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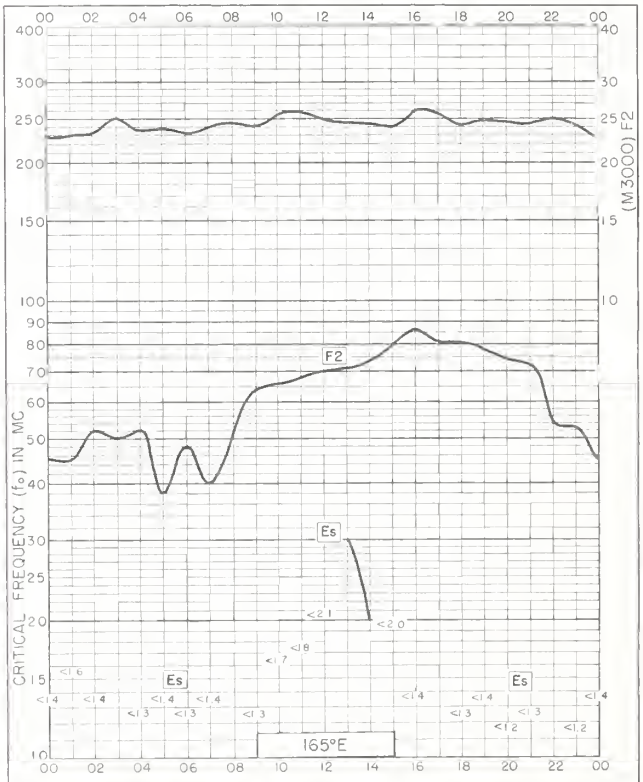


Fig. 92. SCOTT BASE
77.9°S, 166.8°E MAY 1959

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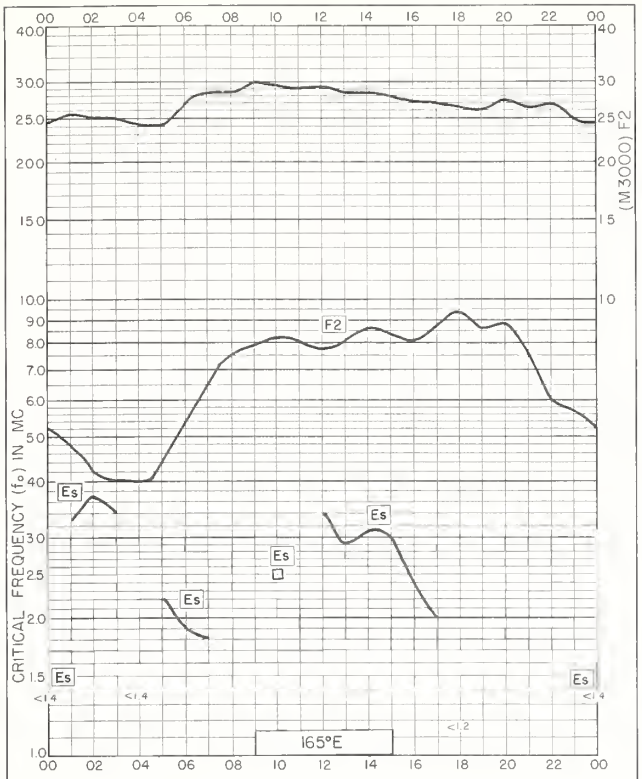


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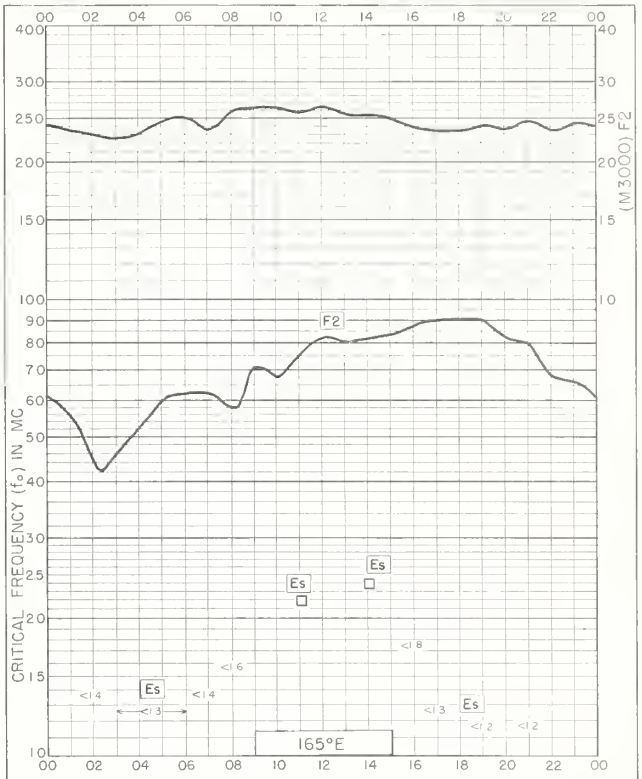


Fig. 94. SCOTT BASE
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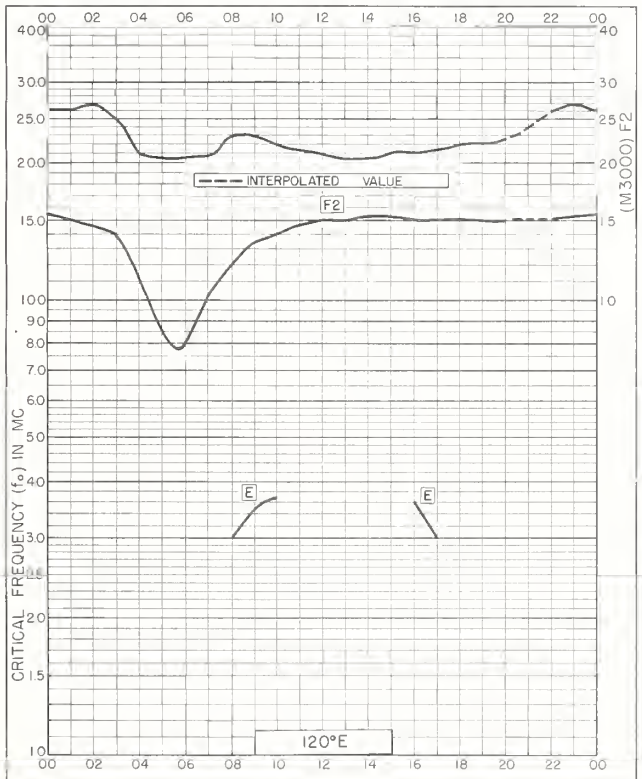


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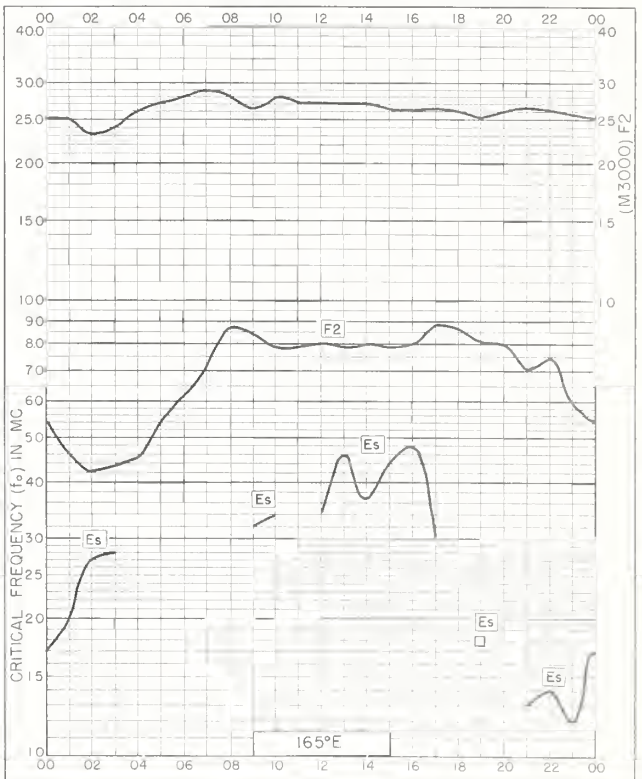


Fig. 96. CAPE HALLETT
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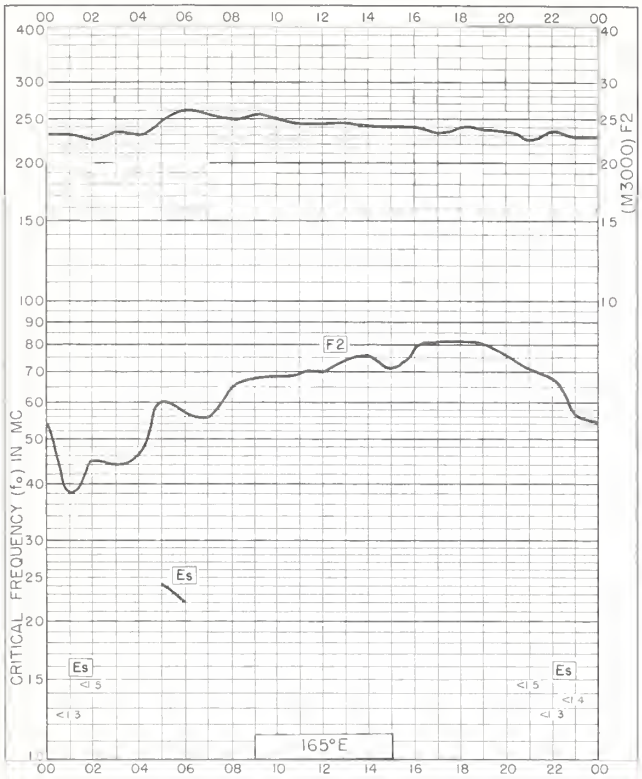


Fig. 97. SCOTT BASE
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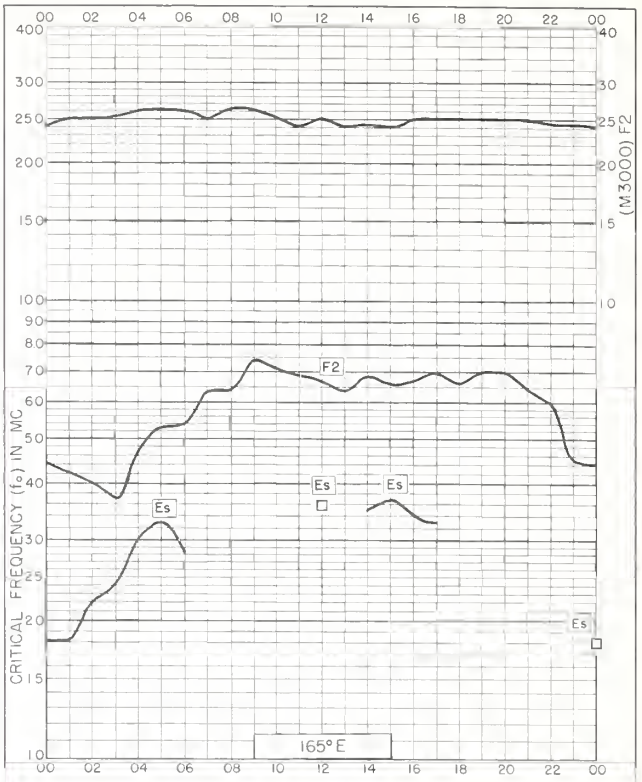


Fig. 98. CAPE HALLETT
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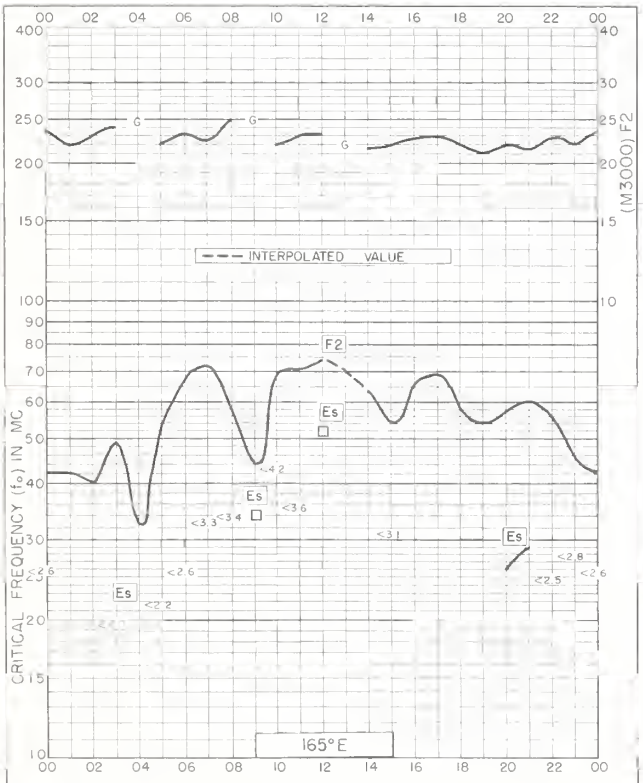


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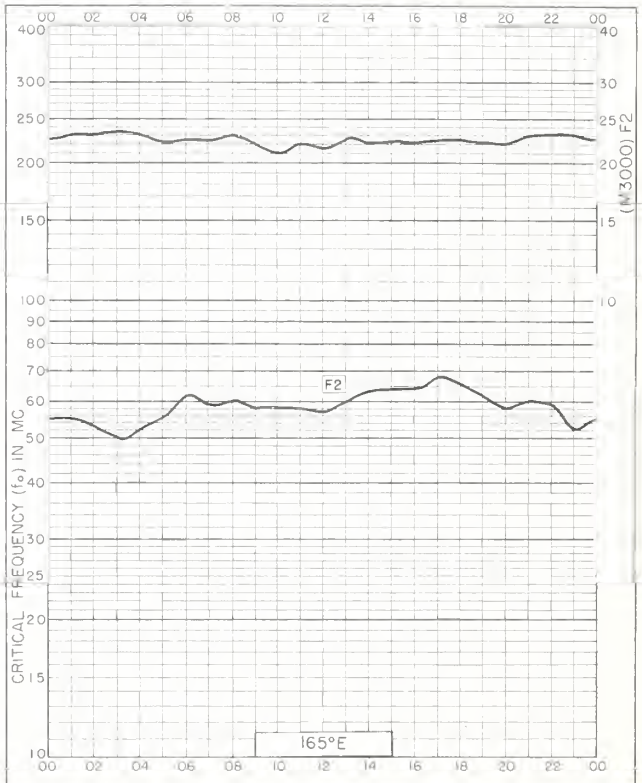


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CRPL Reports

[A detailed list of CRPL publications is available from the Central Radio Propagation Laboratory upon request]

Daily:

Radio disturbance forecasts, every half hour from broadcast stations WWV and WWVH of the National Bureau of Standards.

Telephoned and telegraphed reports of ionospheric, solar, geomagnetic, and radio propagation data.

Weekly:

CRPL—J. North Atlantic Radio Propagation Forecast.
CRPL—Jp. North Pacific Radio Propagation Forecast.

Semimonthly:

CRPL—Ja. Semimonthly Frequency Revision Factors For CRPL Basic Radio Propagation Prediction Reports.

Monthly:

CRPL—D. Basic Radio Propagation Predictions—Three months in advance. (Dept. of the Army, TB 11—499—, monthly supplements to TM 11—499; Dept. of the Air Force, TO 31—3—28 series). On sale by Superintendent of Documents. Members of the Armed Forces should address cognizant military office.

CRPL—F. (Part A). Ionospheric Data.
(Part B). Solar-Geophysical Data.
Limited distribution. These publications are in general disseminated only to those individuals or scientific organizations which collaborate in the exchange of ionospheric, solar, geomagnetic, or other radio propagation data.

Catalog of Data:

A catalog of records and data on file at the U. S. IGY World Data Center A for Airglow and Ionosphere, Boulder Laboratories, National Bureau of Standards, which includes a fee schedule to cover the cost of supplying copies, is available upon request.

The publications listed above may be obtained without charge from the Central Radio Propagation Laboratory, National Bureau of Standards, Boulder Laboratories, Boulder, Colorado, unless otherwise indicated. Please note that the F series is not generally available.

Circulars of the National Bureau of Standards pertaining to Radio Sky Wave Transmission:

NBS Circular 462. Ionospheric Radio Propagation. $1.25.
NBS Circular 465. Instructions for the Use of Basic Radio Propagation Predictions. 30 cents.
NBS Circular 557. Worldwide Radio Noise Levels Expected in the Frequency Band 10 Kilocycles to 100 megacycles. 30 cents.
NBS Circular 582. Worldwide Occurrence of Sporadic *E*. $3.25.

These Circulars are on sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Members of the Armed Forces should address the respective military office having cognizance of radio wave propagation.

Selected Technical Notes of the National Bureau of Standards:

NBS Tech. Note 2. PB151361. World Maps of F2 Critical Frequencies and Maximum Usable Frequency Factors. $3.50. PB151361-2. $3.50.
NBS Tech. Note 13. PB151372. Technical Considerations Leading to an Optimum Allocation of Radio Frequencies in the Band 25 to 60 Mc. $2.50.
NBS Tech. Note 18. PB151377. Radio Noise Data for the IGY. $2.50.
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18-4. PB151377-4, etc. (Sept.-Nov. 1959). $1.50.
NBS Tech. Note 31. PB151390. An Atlas of Oblique-Incidence Ionograms. $2.25.
NBS Tech. Note 40-1. PB151399-1. Mean Electron Density Variations of the Quiet Ionosphere, 1: March 1959. $1.25.
40-2. PB151399-2, etc. 2: April 1959. $1.25.
NBS Tech. Note 117. PB161618. Variations in Frequency of Occurrence of Sporadic E, 1949—1959. $0.75.

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